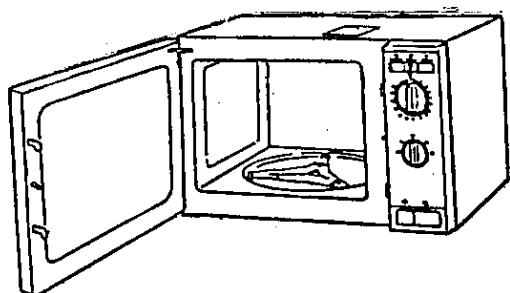


SHARP® SERVICE MANUAL

S5807R6G10EHW

GRILL AND MICROWAVE OVEN



**MODELS R-6G10(W)
R-6G10(B)**

In interests of user-safety the oven should be restored to its original condition and only parts identical to those specified should be used.
(RD16101U)

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SHARP CORPORATION

SERVICE MANUAL

SHARP

GRILL AND MICROWAVE OVEN

R-6G10(W)/ R-6G10(B)

FOREWORD

This Manual has been prepared to provide Sharp Corp. Service Personnel with complete Operation and Service Information for the SHARP GRILL AND MICROWAVE ovens, R-6G10(W)/ R-6G10(B).

It is recommended that service personnel carefully study the entire text of this manual so they will be qualified to render satisfactory customer service.

Check interlock switches and door seal carefully. Special attention should be given to avoid electrical shock and microwave radiation hazard.

(RD36102U)

CAUTION MICROWAVE RADIATION

Personnel should not be exposed to the microwave energy which may radiate from the magnetron or other microwave generating devices if it is improperly used or connected. All input and output microwave connections, waveguides, flanges and gaskets must be secured. Never operate the device without a microwave energy absorbing load attached. Never look into an open waveguide or antenna while the device is energized.

Note(Parts List) : The parts marked "*" are used in voltage more than 250V.

(RD36202U)

SHARPCORPORATION

OSAKA, JAPAN

(RD37201U)

PRODUCT DESCRIPTION

SPECIFICATION

ITEM	DESCRIPTION
Power Requirements	220 Volts 50 Hertz Single phase, 3 wire earthed
Power Consumption	Microwave cooking 1.25 kW Dual cooking 2.55 kW Grill cooking 1.35 kW
Power Output	600 watts nominal of RF microwave energy (2 liter water load) Operating frequency of 2450MHz
Grill Heating element Power Output	1.3 kW
Case Dimensions	Width 520 mm Height 341 mm including foot Depth 416 mm
Cooking Cavity Dimensions	Width 340 mm Height 203 mm Depth 350 mm
Turntable diameter	330mm
Control Complement	60 min. Dual Speed Timer Microwave Cooking Control Repetition Rate; FULL POWER Full power throughout the cooking time ROAST approx. 70% of Full Power SIMMER approx. 50% of Full Power DEFROST approx. 30% of Full Power WARM approx. 10% of Full Power Cooking Start Button, Cooking Mode Selector Microwave cooking, Grill cooking, Dual cooking
Set Weight	Approx. 23 kg

(RD44101U)

GENERAL INFORMATION

WARNING

THIS APPLIANCE MUST BE EARTHED

IMPORTANT

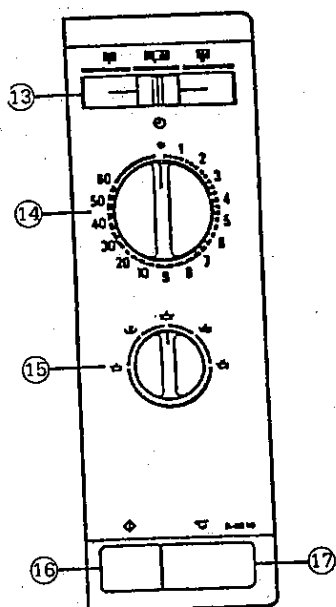
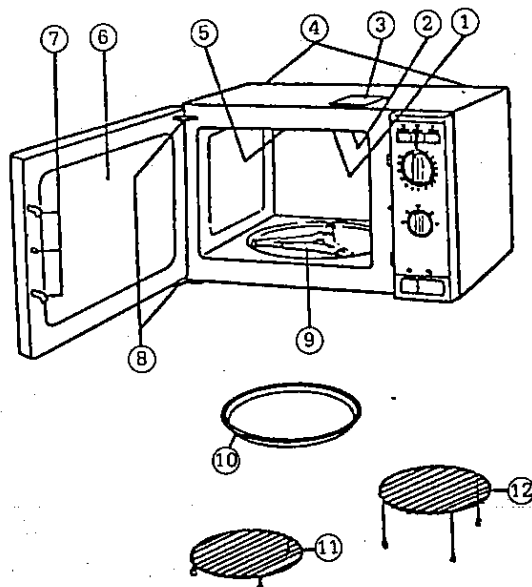
THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE:

GREEN-AND-YELLOW	: EARTH
BLUE	: NEUTRAL
BROWN	: LIVE

(RD51107U)

NOTE: Numbers and letters shown after sentences such as "RD44101U" are for factory use only.

OPERATING INSTRUCTIONS



1. Waveguide cover
2. Oven lamp
3. Access cover for oven lamp replacement
4. Ventilation openings
5. Grill heater unit
6. Oven door with see-through window
7. Door latches
8. Hinges
9. Roller stay
10. Removable turntable
11. Low rack (50 mm)
12. High rack (135 mm)
13. Cooking mode selector

MICROWAVE	
GRILL	
DUAL COOK	
14. Dual speed timer (0-60 min)
15. Microwave cooking control (10-100%)
16. Cooking start button ()
17. Door open button ()

OPERATION

DESCRIPTION OF OPERATING SEQUENCE

The following is a description of component functions during oven operation.

(RD71101U)

OFF CONDITION

Closing the door activates heater switch and 2nd latch switch (In this condition, the monitor switch contacts are opened.)

With the timer dial at "●" position and the door closed, no components in the oven will operate. (Figure O-1).

Note: When the door is opened or the timer is set, the oven lamp comes on.

MICROWAVE COOKING CONDITION

Set the cooking mode selector to "MICRO-WAVE".

The switch condition are as follows.

Switch	Contact	Condition
Micro Select Switch	COM-NC	Close
Grill Select Switch	COM-NC	Open
2nd latch Switch	COM-NO	Close
	COM-NC	Open
Monitor Switch	COM-NO	Close
	COM-NC	Open
Heater Switch		Close

FULL POWER COOKING

When the door is closed, the contacts COM-NO of the 2nd latch switch and monitor switch are activated. The microwave cooking control is set to "FULL POWER" position an cooking time is selected by turning the timer.

When turning the timer, the oven lamp lights.

When the "COOKING START" button is pushed, the following operations occur.: (Figure O-2)

1-1. The contacts of 1st latch & cook switch are closed.

1-2. Then Following components are energized.

○ : energized — : de-energized

Oven lamp	○	Power transformer	○
Heater relay	○	Surge relay	○
Timer motor	○	Fan motor	○
Turntable motor	○	Magnetron	○
Grill heating element	—		

1-3. 220 volts A.C. is supplied to the primary winding of the power transformer and is converted to about 3.30 volts A.C. output on the filament winding, and approximately 1950 volts A.C. on the high voltage winding.

1-4. The filament winding voltage heats the magnetron filament and the H.V. winding voltage is sent to a voltage doubler circuit.

1-5. The microwave energy produced by the magnetron is channeled through the waveguide into the cavity feed-box, and then into the cavity where the food is placed to be cooked.

1-6. Upon completion of the selected cooking time, the timer bell rings, and contacts of the timer are open, then the activated components as item 1-2 are de-energized.

The oven reverts to the OFF condition.

1-7. The monitor switch is electrically monitoring the operation of the 1st latch & cook switch and is mechanically associated with the door so that it will function in the following sequence.

(1) When the door opens from closed position during cooking, the 1st latch & cook switch first operates to open its contacts, and then the monitor switch contacts(COM-NC) close, and 2nd latch switch contacts(COM-NO) open, and then heater switch contacts open.

(2) When the door is closed from open position, the contacts(COM-NC) of the the monitor switch open and 2nd latch switch contacts(COM-NO) first close and then the contacts of heater switch close.

If the 1st latch & cook switch fails with its contacts closed when the door is opened, closing of the monitor switch contacts(COM-NC) will form a short circuit through the fuse, monitor resistor and 1st latch & cook switch, causing the fuse to blow.

ROAST, SIMMER, DEFROST, WARM COOKING

When Variable Cooking Power is programed, the 220 volts A.C. is supplied to the power transformer intermittently through the vari-switch within a 30 second time base. Microwave power operation is as follows:


VARI-MODE	ON TIME	OFF TIME
FULL POWER (100% power)	30 sec.	0 sec.
ROAST (approx. 70% power)	24 sec.	6 sec.
SIMMER (approx. 50% power)	18 sec.	12 sec.
DEFROST (approx. 30% power)	12 sec.	18 sec.
WARM (approx. 10% power)	6 sec.	24 sec.

Note: The ON/OFF time ratio does not correspond with the percentage of microwave power, because approx. 2 seconds are needed for heating of the magnetron filament.

(RD71403U)

DUAL COOKING CONDITION

In this condition, the food is cooked by both microwave energy and grill heating energy simultaneously.

Set the cooking mode selector to "  DUAL COOK". The switch condition are as follows.

Switch	Contact	Condition
Micro Select Switch	COM-NC	Close
Grill Select Switch	COM-NC	Close
2nd latch Switch	COM-NO COM-NC	Close Open
Monitor Switch	COM-NO COM-NC	Close Open
Heater Switch		Close

Set the desired cooking time by turning timer.
You can select the microwave power levels.

When the "COOKING START" button is pushed, the following operations occur.: (Figure O-4)


1. The contacts of 1st latch & cook switch are closed.
2. Then Following components are energized.

O : energized — : de-energized	
Oven lamp	O Power transformer O
Heater relay	O Surge relay O
Timer motor	O Fan motor O
Turntable motor	O Magnetron O
Grill heating element	O

3. Now the food is cooked by microwave and grill heating element energy simultaneously.
4. Upon completion of the selected cooking time, the timer bell rings, and contacts of the timer are opened, then the activated components as item 2 are de-energized.
The oven reverts to the OFF condition.
5. But the fan motor rotates when the temperature of cooling thermal cut-out is higher than 100 °C. When it becomes lower than 80 °C, the fan motor will stop rotating automatically.

GRILL COOKING CONDITION

In this condition, the food is cooked by grill heating element energy.

Set the cooking mode selector to "  GRILL".
The switch condition are as follows.

Switch	Contact	Condition
Micro Select Switch	COM-NC	Open
Grill Select Switch	COM-NC	Close
2nd latch Switch	COM-NO COM-NC	Close Open
Monitor Switch	COM-NO COM-NC	Close Open
Heater Switch		Close

Set the desired cooking time by turning timer.
You can not set the desired temperature.

When the "COOKING START" button is pushed, the following operations occur.: (Figure O-3)

1. The contacts of 1st latch & cook switch are closed.
2. Then Following components are energized.

O : energized — : de-energized	
Oven lamp	O Power transformer —
Heater relay	O Surge relay —
Timer motor	O Fan motor O
Turntable motor	O Magnetron —
Grill heating element	O

3. Now the food is cooked
4. Upon completion of the selected cooking time, the timer bell rings, and contacts of the timer are opened, then the activated components as item 2 are de-energized.
The oven reverts to the OFF condition.
5. But the fan motor rotates when the temperature of cooling thermal cut-out is higher than 100 °C. When it becomes lower than 80 °C, the fan motor will stop rotating automatically.

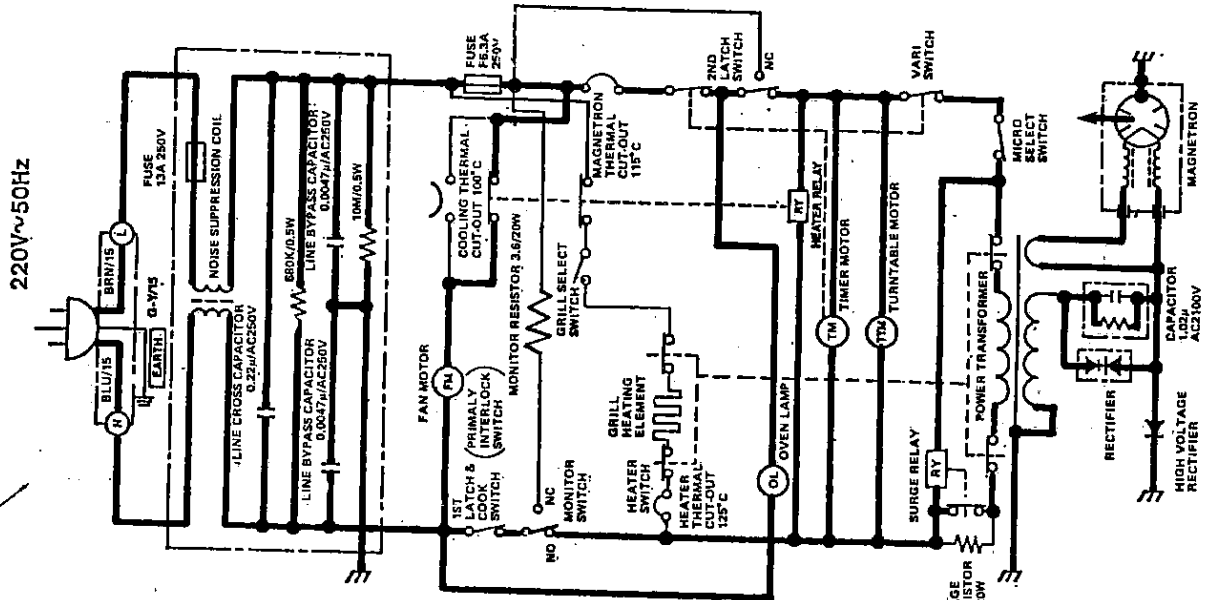


Figure O-2. Oven Schematic - Microwave Cooking Condition

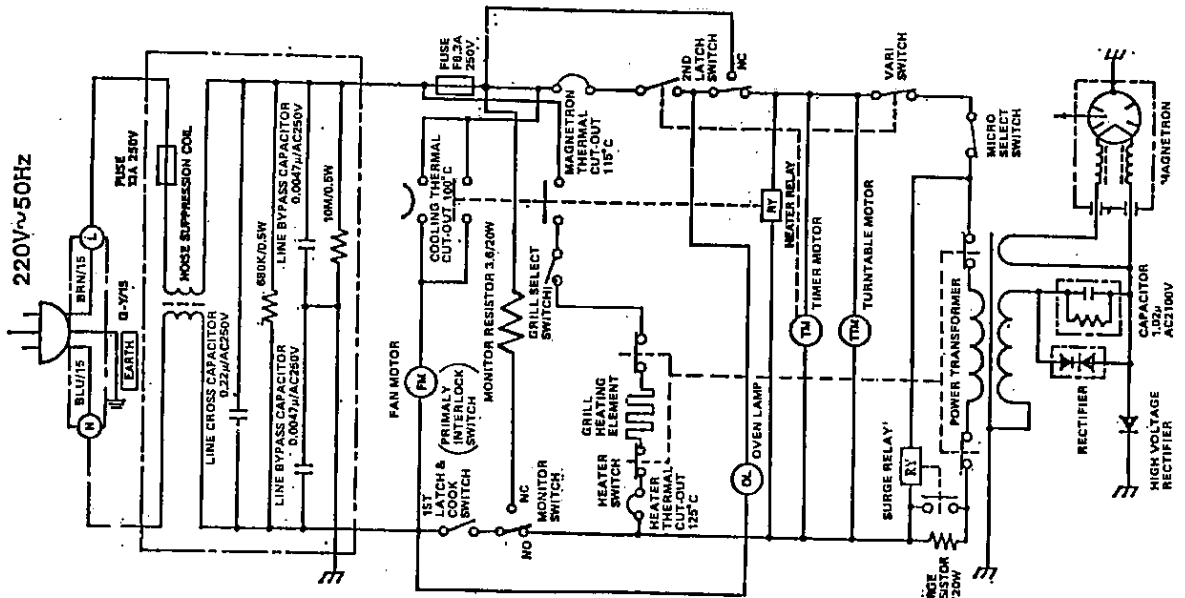
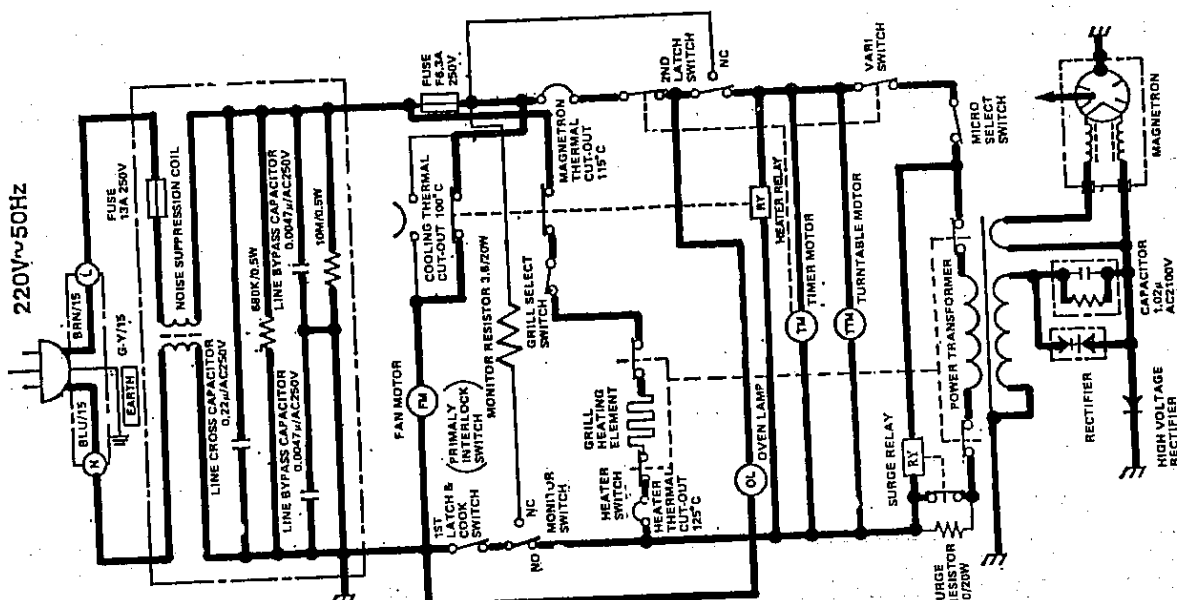


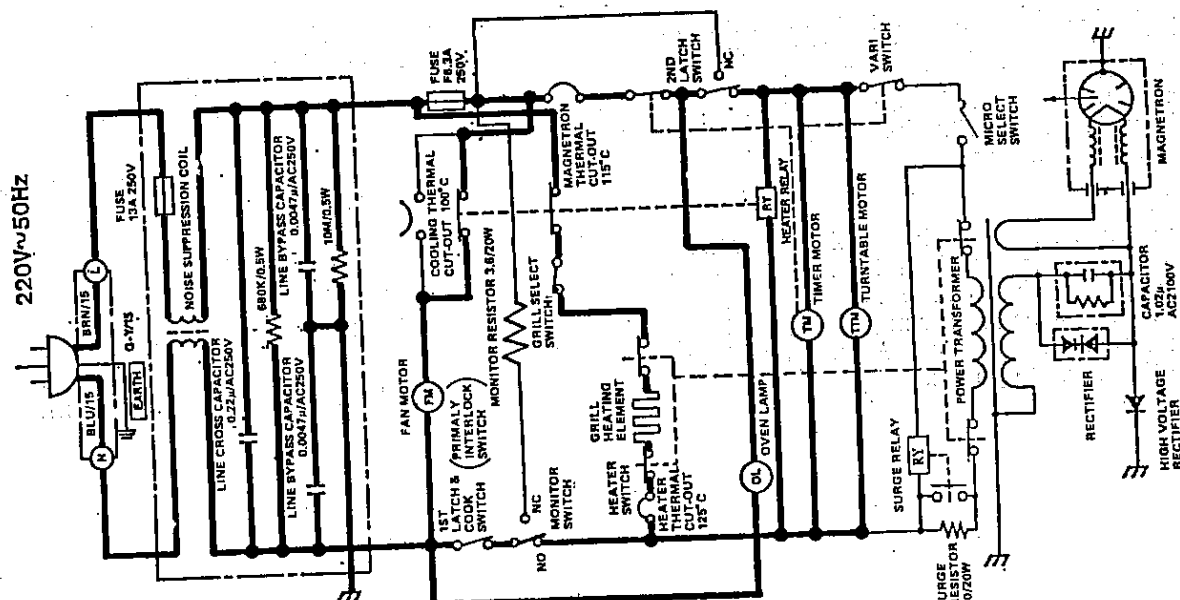
Figure O-1. Oven Schematic - OFF Condition



AC CORD CONNECTION
BRN : BROWN
BLU : BLUE
G.Y : GREEN AND
/15 : SECTIONAL AREA
OF 1.5mm² MIN.

SCHEMATIC
NOTE: CONDITION
OF OVEN
1. DOOR CLOSED
2. TIMER "ON"
3. COOKING MODE
"DUAL COOK"
4. MICROWAVE COOKING
CONTROL
FULL POWER "P"
5. "COOKING START"
BUTTON "P" PUSHED

Figure O-4. Oven Schematic - Dual Cooking Condition



AC CORD CONNECTION
BRN : BROWN
BLU : BLUE
G.Y : GREEN AND
/15 : SECTIONAL AREA
OF 1.5mm² MIN.

SCHEMATIC
NOTE: CONDITION
OF OVEN
1. DOOR CLOSED
2. TIMER "ON"
3. COOKING MODE
"GRILL"
4. "COOKING START"
BUTTON "P" PUSHED

Figure O-3. Oven Schematic - Grill Cooking Condition

DESCRIPTION AND FUNCTION OF COMPONENTS

1ST LATCH & COOK SWITCH

This switch functions both as a latch switch and the cook switch.

Operation is as follows.

1. When the door is closed, the lower latch head snaps down above the switch lever which causes not to close the switch.
 2. When the start button is pressed, it pushes the switch lever. The switch lever now depresses the plunger of the switch closing its COM-NO contacts (ON condition).
 3. When the open button is pressed, it pushes the open lever. The open lever raises the switch lever raising the lower latch head.
- As that time, the switch lever is released from the plunger of the 1st latch & cook switch. The switch lever is returned to its original position. Now, the COM-NO contacts of the switch opened (OFF condition).

2ND LATCH SWITCH

The switch is activated by the upper latch head on the door.

When the door is opened, the switch interrupts the circuit to all components, except oven lamp and fan motor. Then the cook cycle is stopped.

A cook cycle cannot take place until the door is firmly closed and the start button is depressed with the timer set.

HEATER SWITCH

The heater switch is located at the latch hook. The contacts of the heater switch are mechanically opened by opening the door, and closed by closing the door.

DOOR OPEN MECHANISM

The door can be opened by pushing the open button on the control panel. When the open button is pushed, the open lever pushes switch lever. The switch lever pushes lower latch head on the door upward. The upper latch head is linked with the lower latch lead, so now, the door can be opened.

MONITOR SWITCH

The monitor switch is activated (the COM-NC contacts opened) by the lower latch head on the door while the door is closed. The switch is intended to render the oven inoperative by means of blowing the fuse(F6.3A) when the contacts of the 1st latch & cook switch fail to open when the door is opened.

Function

1. When the door is opened, the monitor switch COM-NC contacts close (to the ON condition) due to their being normally closed. At this time the 1st latch & cook switch is in the OFF condition (contacts open) due to their being normally open contact switches.
2. As the door goes to a closed position, the monitor switch COM-NC contacts are first opened and then the 1st latch & cook switch contacts close when the cook button is depressed. (On opening the door, each of these switches operate inversely.)
3. If the door is opened, and the 1st latch & cook switch contacts fail to open, the fuse blows simultaneously with closing of the monitor switch COM-NC contacts.

CAUTION: BEFORE REPLACING A BLOWN FUSE TEST THE 1ST LATCH & COOK SWITCH AND MONITOR SWITCH FOR PROPER OPERATION. (REFER TO CHAPTER "TEST PROCEDURE").

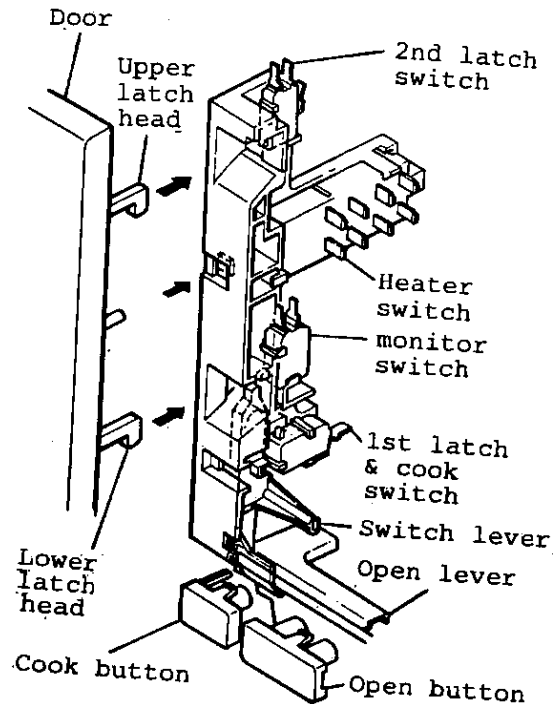


Figure D-1. Door Open Mechanism

TIMER ASSEMBLY**Timer Contacts:**

The timer contacts are mechanically opened or closed by turning the dial knob located on the timer motor shaft.

Vari-switch:

The vari-switch is operated by the cam roller. If the variable cooking control is set at ROAST, SIMMER, DEFROST, WARM COOKING position, 220 volts A.C. is supplied to the power transformer intermittently within a 30 seconds time base. The following chart shows the vari-switch operation in the various modes.

VARI-MODE	ON TIME	OFF TIME
FULL POWER (100% power)	30 sec.	0 sec.
ROAST (approx. 70% power)	24 sec.	6 sec.
SIMMER (approx. 50% power)	18 sec.	12 sec.
DEFROST (approx. 30% power)	12 sec.	18 sec.
WARM (approx. 10% power)	6 sec.	24 sec.

ON: contacts of switch closed.
OFF: contacts of switch open.




Note: The ON/OFF time ratio does not correspond with the percentage of microwave power, because approx. 2 seconds are needed for heating of the magnetron filament.

MODE SELECT MECHANISM, MICRO SELECT SWITCH AND GRILL SELECT SWITCH


There are micro cooking mode, grill cooking mode and dual cooking mode.

The mode can be set by sliding the mode select knob. The mode select knob operates the mode select assembly through the mode select lever. The micro select switch and grill select switch are controlled by the mode select assembly. The operations of the two select switches are as follows.


Table: Operation of the micro select switch and grill select switch

Position of Mode select knob	Cooking mode	Micro select switch COM-NC contacts	Grill select switch COM-NC contacts
The left 	Microwave cooking	Close	Open
The center 	Dual cooking	Close	Close
The right 	Grill cooking	Open	Close


MICROWAVE COOKING

When sliding the mode select knob to the left,  the mode select assembly releases the plunger of the micro select switch, and it pushes the plunger of the grill select switch at the same time. Then the COM-NC contacts of the micro switch are closed, and the COM-NC contacts of the grill select switch are opened.

GRILL COOKING

When sliding the mode select knob to the right  the mode select assembly releases the plunger of the grill select switch, and it pushes the plunger of the micro select switch at the same time. Then the COM-NC contacts of the grill select switch are closed, and the COM-NC contacts of the micro select switch are opened.

DUAL COOKING

When sliding the mode select knob to the center , the mode select assembly releases the both plungers of the micro select switch and the grill select switch. Then the COM-NC contacts of the two select switches are closed.

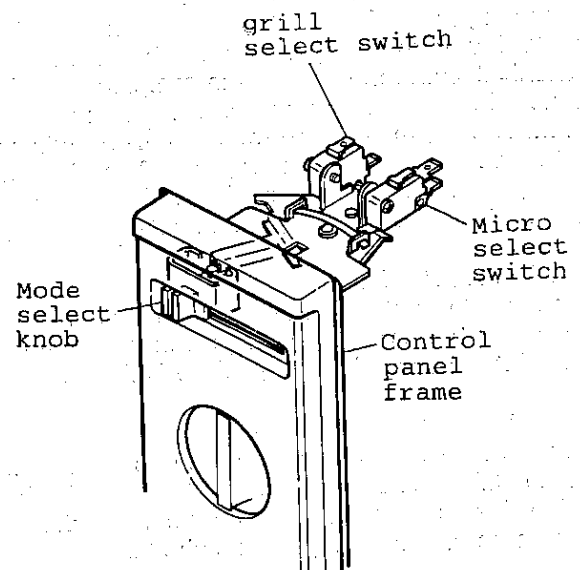


Figure D-2. Mode Select Mechanism

MAGNETRON THERMAL CUT-OUT

The magnetron thermal cut-out is located on the waveguide flange to prevent damage to the magnetron. If the temperature of waveguide flange reaches high temperature more than approx. 115 °C abnormally when the fan motor is locked or air intake duct and ventilation openings are obstructed, the magnetron thermal cut-out will open. After that when the temperature of the waveguide flange reduce lower than approx. -20 °C, the magnetron thermal cut-out will close. Under normal operation, the magnetron thermal cut-out always closes.

HEATER THERMAL CUT-OUT

The heater thermal cut-out is located on the partition plate to prevent the temperature rise of the oven for grill cooking mode or dual cooking mode. If the temperature of the partition plate reaches more than approx. 125 °C abnormally when the fan motor is locked or air intake duct and ventilation openings are obstructed, the heater thermal cut-out will open. And the grill heating element will be de-energized. After that when the temperature of the partition plate reduce lower than approx. 105 °C, the heater thermal cut-out will close. Under normal operation, the heater thermal cut-out always closes.

COOLING THERMAL CUT-OUT

The cooling thermal cut-out is located on the exhaust duct to lower the temperature of the electronic or mechanical components. If the temperature of the exhaust duct reaches high temperature more than approx. 100 °C, the cooling thermal cut-out will close and the fan motor will be energized. After that when the temperature of the exhaust duct reduce lower than approx. 80 °C, the cooling thermal cut-out will open.

NOISE FILTER UNIT

The noise filter unit is located on the noise unit angle installed to the rear cabinet to prevent the radio frequency interference. And it has Fuse 13A 250V.

FUSE 13A 250V

The fuse 13A 250V is located on the noise filter unit. The fuse 13A 250V blows to prevent an electric shock or a fire due to excessive electric currents when the wire harness or electrical parts are shorted.

GRILL HEATING ELEMENT

The grill heating element is located on the reflector. The grill heating element sends out heat to grill foods.

FUSE F6.3A 250V

The fuse F6.3A 250V is located in the fuse holder installed to the relay mounting plate. The fuse F6.3A 250V blows to prevent an electric shock or a fire due to excessive electric currents when high voltage components, high voltage wires, wire harness or electrical parts are shorted. And also the fuse F6.3A 250V blows simultaneously with closing of the monitor switch COM-NC contacts if the door is opened and the 1st latch & cook switch contacts fail to open.

HEATER RELAY

Heater relay is located on the relay mounting plate to open or close the circuit to the fan motor and grill heating element.

SURGE RELAY AND SURGE RESISTOR

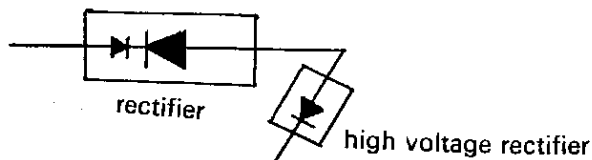
Surge relay is located on the relay mounting plate. Surge resistor is located on the chassis support. When the cooking start button is pushed at microwave cooking or dual cooking condition, at first the surge relay contacts open and the surge current flows through the surge resistor after approx. 6 msec. And then the surge relay contacts close and the current flows through the surge relay contacts to the power transformer. The surge resistor puts down the surge current. If the surge resistor is open, the home breaker, home fuse, fuse 13A 250V or fuse F6.3A 250V may break down when the cooking start button is pushed microwave or dual cooking condition. If the surge relay contacts fails to close when the cooking start button is pushed microwave or dual cooking condition, the temperature of the surge resistor may rise high and may damage the electric parts and mechanical parts around the surge resistor.

MONITOR RESISTOR

The monitor resistor is located on the chassis support. The monitor resistor prevents the fuse F6.3A 250V bursting when the fuse F6.3A 250V blows due to the operation of the monitor switch.

RECTIFIER

The rectifier is solid state device that prevents current flow in both directions. And it prevents the temperature rise of the power transformer by blowing the fuse F6.3A when the high voltage rectifier is shorted.



The rated peak reverse voltage of D1 of the rectifier is 6 KV. The rated peak reverse voltage of D2 of the rectifier is 1.5 KV. D1 and D2 of the rectifier or high voltage rectifier are shorted when the each peak reverse voltage goes beyond the each rated peak reverse voltage. (The process of the blowing the fuse F6.3A.)

1. The high voltage rectifier is shorted by any causes when microwave cooking or dual cooking.
2. The peak reverse voltage of D2 of the rectifier goes beyond the rated peak reverse voltage 1.5 KV in the voltage doubler circuit.
3. D2 of the rectifier is shorted.
4. The large electric currents flow through the high voltage winding of the power transformer.
5. The large electric currents beyond F6.3A flow through the primary winding of the power transformer.
6. The fuse F6.3A blows by the large electric currents.
7. The oven stops its operation.

POWER TRANSFORMER

The transformer consists of three windings: primary, filament and high voltage. During a cook cycle, the 220 volts A.C. applied to the primary winding of the transformer is converted to 3.3 volts A.C. on the filament winding and approximately 1950 A.C. on the high voltage winding. The 3.3 volts A.C. heats the magnetron filament. This causes the tube cathode to readily emit the electrons necessary for tube conduction whenever the negative 4000 D.C. voltage is applied to the cathode. The 1950 volts A.C. voltage is supplied to the voltage doubler circuit.

VOLTAGE DOUBLER CIRCUIT

The voltage doubler circuit consists of a high voltage rectifier and a high voltage capacitor. The 1950 volts A.C. from the high voltage winding of the power transformer is applied to the voltage doubler circuit, where it is rectified and converted to approximately 4000 volts negative D.C. needed for magnetron operation.

High voltage rectifier:

The high voltage rectifier is solid state device that allows current flow in one direction, but prevents current flow in the opposite direction. This acts as rectifier changing alternating current into pulsating D.C.

High voltage capacitor:

The high voltage capacitor is able to store energy on one half of the power cycle and then release it along with the transformer output to produce approx. 4000 negative D.C. volts to the magnetron.

MAGNETRON TUBE

The basic magnetron tube is a cylindrical cathode within a cylindrical anode surrounded by a magnetic field. When the cathode is heated by the filament winding of the power transformer, electrons are given off by the cathode.

These negatively charged electrons are attracted to the more positive anode of the tube when the negative 4000 D.C. voltage is applied to the cathode.

Ordinarily, the electrons would travel in a straight line from the cathode to the anode as shown in Figure D-3. But the addition of a magnetic field, provided by permanent magnets surrounding the anode, causes the electrons to take an orbital path between the cathode and anode, Figure D-4.

As the electrons approach the anode, they travel past the small resonant cavities that are part of the anode. Interaction occurs, causing the resonant cavities to oscillate at the very high frequency of 2450 megahertz. This RF energy is radiated from the magnetron antenna into the waveguide, and finally into the cooking cavity where food has been placed to be cooked.

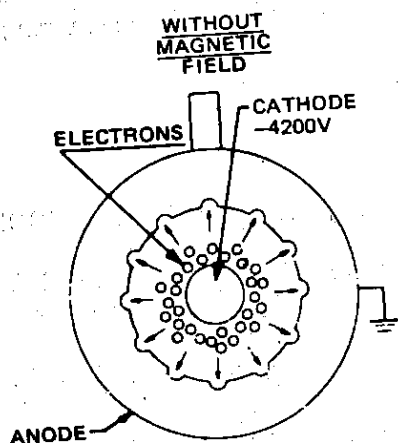


Figure D-3. Basic Magnetron without Magnetic Field

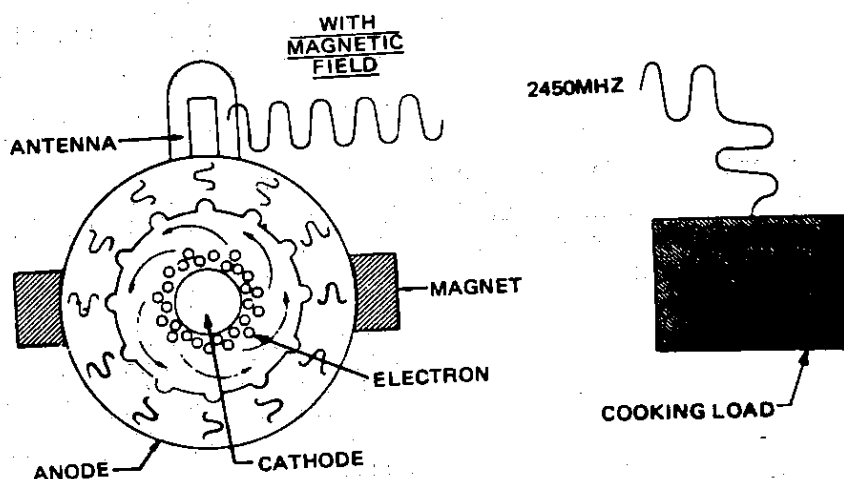


Figure D-4. Basic Magnetron with Magnetic Field

SERVICING

TROUBLESHOOTING GUIDE

When troubleshooting the oven, it is helpful to follow the Sequence of Operation in performing the checks. Many of the possible causes of trouble will require that a specific test be performed. These tests are given a procedure letter which will be found in the "Test Procedure" section.

IMPORTANT: If the oven becomes inoperative because of a blown fuse (F6.3A) in 1st latch & cook switch - the monitor switch circuit, check 1st latch & cook switch and the monitor switch before replacing the fuse (F6.3A).

PROBLEM	POSSIBLE CAUSE	TEST PROCEDURE OR CORRECTION
---------	----------------	------------------------------

OFF CONDITION

Home fuse blows when power cord is plugged into wall receptacle.	Shorted wire in power cord or wire harness.	Replace cord or check wiring.
Fuse(13A 250v) blows when power cord is plugged into wall receptacle.	Shorted wire in power cord or wire harness.	Replace power cord or check and repair harness, replace fuse.
Oven lamp does not light at door opened.	Defective noise filter unit.	Procedure M.
	No power at outlet.	Check wall outlet.
	Open wire in power cord or wire harness.	Replace or repair.
	Blown fuse(F6.3A).	Procedure N.
	Blown fuse 13A 250V.	Replace the fuse 13A 250V.
	Defective 2nd latch switch.	Procedure E.
	Defective oven lamp.	Replace oven lamp.
	Defective oven lamp socket.	Replace oven lamp socket.
	Open or loose wire connection to the above components.	Replace or repair wiring.

DUAL COOKING CONDITION

(Set the cooking mode selector to DUAL COOK and set the timer.)

Start button is pushed, but the oven does not operate at Dual cooking condition.	The oven can not operate at Grill cooking condition.	Refer to "GRILL COOKING CONDITION".
	The oven can not operate at Microwave cooking condition.	Refer to "MICROWAVE COOKING CONDITION".
	Defective heater switch.	Procedure J.
	Blown fuse 13A 250V.	Replace fuse 13A 250V.
	Defective noise filter unit.	Procedure M.
	Open or loose wiring to above components.	check and repair wiring.

PROBLEM	POSSIBLE CAUSE	TEST PROCEDURE OR CORRECTION
---------	----------------	------------------------------

MICROWAVE COOKING CONDITION

(Set the cooking mode selector to MICROWAVE and set the timer.)

Oven lamp does not light with setting the timer.	Defective the timer.	Procedure G.
	Magnetron thermal cut-out is open.	Procedure H.
	Defective oven lamp socket.	Replace oven lamp socket.
	Defective oven lamp.	Replace oven lamp.
	Blown fuse(F6.3A).	Procedure N.
	Blown fuse 13A 250V.	Replace fuse 13A 250V.
	Open or loose wire connection to the above components.	Replace or repair wiring.
Fan motor does not rotate when start button is pushed.	Defective fan motor.	Replace fan motor.
	Defective heater relay and its contacts.	Procedure K.
	Blown fuse 13A 250V.	Replace fuse 13A 250V.
	Blown fuse(F6.3A).	Procedure N.
	Defective 1st latch & cook switch.	Procedure E.
	Mis-adjustment of the 1st latch switch & cook switch.	Adjust the 1st latch switch & cook switch referring to "1st latch switch, 2nd latch switch, monitor switch and heater switch adjustment".
	Open or loose wire connection to the above components.	Replace or repair wiring.
Timer motor does not operate when start button is pushed. (Fan motor rotates.)	Defective the timer or its contacts.	Procedure G.
	Open or loose wire connection to the above components.	Replace or repair wiring.
Turntable motor does not rotate when start button is pushed. (Fan motor rotates.)	Open or loose wire connection to the turntable motor.	Check and repair wiring.
	Defective turntable motor.	Replace turntable motor.
Oven seems to be operating but little or no heat is produced in oven load. (Microwave cooking control is set at "FULL POWER" position.)	Defective magnetron.	Procedure A.
	Defective high voltage rectifier assembly.	Procedure C.
	Defective high voltage capacitor.	Procedure D.
	Defective power transformer.	Procedure B.
	Defective vari-switch or timer motor.	Procedure G.
	Defective micro select switch.	Procedure E.
	Defective heater switch.	Procedure J.
	Defective surge relay.	Procedure L.
	Open or loose wiring to above components.	Check and repair wiring
Oven operates normally when the microwave cooking control is set at "FULL POWER" position, but not in any other position.	Defective vari-switch on the timer.	Procedure G.
	The wire to the vari-switch are shorted.	Check and repair wiring.
	Open or loose wiring to timer.	Check and repair wiring.
Oven goes into cook cycle, but shuts down before end of cycle.	Magnetron thermal cut-out is opened.	Procedure H.
	Defective timer.	Replace timer.
	Fan motor stops.	Check and repair wiring.
	Open or loose wiring to above components.	Check and repair wiring.
Oven steps as soon as when the cooking start button is pushed.	Defective rectifier.	Procedure C.

PROBLEM	POSSIBLE CAUSE	TEST PROCEDURE OR CORRECTION
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GRILL COOKING CONDITION

(Set the cooking mode selector to GRILL and set the timer.)

Start button is pushed, but grill heating element does not operated. (Turntable rotates.)	Defective grill heating element.	Procedure I.
	Defective grill select switch.	Procedure E.
	Defective contacts of heater relay.	Procedure K.
	Defective heater socket.	Replace heater socket.
	Defective heater switch.	Procedure J.
	Defective heater thermal cut-out.	Procedure H.
	Open or loose wire connection to above components.	Check or repair wiring.
	The two terminals of grill heater unit does not fit into the heater socket.	Check and fit the two terminals of grill heater unit into the heater socket, referring "TO INSTALL THE GRILL HEATER UNIT".
Oven lamp does not light with setting the timer.	Defective the timer.	Procedure G.
	Magnetron thermal cut-out is open.	Procedure H.
	Defective oven lamp socket.	Replace oven lamp socket.
	Defective oven lamp.	Replace oven lamp.
	Blown fuse(F6.3A).	Procedure N.
	Replace the fuse 13A 250V.	Replace fuse 13A 250V.
Fan motor does not rotate when start button is pushed.	Open or loose wire connection to the above components.	Replace or repair wiring.
	Defective fan motor.	Replace fan motor.
	Defective heater relay and its contacts.	Procedure K.
	Blown fuse 13A 250V.	Replace fuse 13A 250V.
	Blown fuse(F6.3A).	Procedure N.
	Defective 1st latch & cook switch.	Procedure E.
	Mis-adjustment of the 1st latch latch switch & cook switch.	Adjust the 1st latch switch & cook switch referring to "1st latch switch, 2nd latch switch, monitor switch and heater switch adjustment".
Timer motor does not operate when start button is pushed. (Fan motor rotates.)	Open or loose wire connection to the above components.	Replace or repair wiring.
	Defective the timer or its contacts.	Procedure G.
	Open or loose wire connection to the above components.	Replace or repair wiring.
Turntable motor does not rotate when start button is pushed. (Fan motor rotates.)	Open or loose wire connection to the turntable motor.	Check and repair wiring.
	Defective turntable motor.	Replace turntable motor.
Start button is pushed, but grill heating element stops its operate soon (after about 10 minutes).	Heater thermal cut-out is opened.	Procedure H. Check fan blade, fan duct, fan motor, air intake duct, partition plate, exhaust duct, and ventilation openings.

TEST PROCEDURES

PROCEDURE
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COMPONENT TEST

A

MAGNETRON ASSEMBLY TEST

DISCHARGE THE HIGH VOLTAGE CAPACITOR BEFORE TOUCHING ANY OVEN COMPONENTS OR WIRING.

To test for an open filament, isolate the magnetron from the high voltage circuit. A continuity check across the magnetron filament leads should indicate less than 1 ohm.

To test for a shorted magnetron, connect the ohmmeter leads between the magnetron filament leads and chassis ground. This test should indicate an infinite resistance. If there is little or no resistance, the magnetron is grounded and must be replaced.

Power output of the magnetron can be measured by performing a water temperature rise test. This test should only be used if above tests do not indicate a faulty magnetron and there is no defect in the following components or wiring: high voltage rectifier assembly, high voltage capacitor, and power transformer.

MICROWAVE OUTPUT POWER

Microwave output power from the magnetron can be measured by way of substitution, i.e. it can be measured by using water load how much it can be absorbed by the water load. To measure the microwave output power in the microwave oven, the relation of calorie and watt is used. When P(W) heating works for t(second), approximately $P \times t / 4.2$ calorie is generated. On the other hand, if the temperature of the water with V(ml) rises ΔT (°C) during this microwave heating period, the calorie of the water is $V \times \Delta T$.

The formular is as follows;

$$P \times t / 4.2 = V \times \Delta T$$

$$P (W) = 4.2 \times V \times \Delta T / t$$

Our condition for the water load is as follows:

Water load ... 2000 ml, Heating time ... 140 seconds
 $P = 60 \times \Delta T$

Measuring method;

1. Put the water load of two (2) litres on the center of the oven shelf. The water load should be arranged in two (2) Pyrex beakers, the size of which is one (1) litre, and be placed at right and left, side by side, on the oven shelf.
2. Measure the temperature of water before heating and also after heating during 140 seconds by microwave, and calculate the temperature rise. The temperature rise should be the average of temperature differences measured in each beaker.
3. The output power should be calculated as follows. In case the measuring result is not satisfactory, execute the measurement several times and judge the result from the synthetic point of view. Microwave output power should be within $\pm 15\%$ of the nominal one.

Calculation of output power;

Microwave output power ... $P (W) = 60 \times \Delta T$ (°C)
 $\Delta T = (\Delta TL + \Delta TR) / 2$: average temperature rise
 $\Delta TL = (TL2 - TL1)$, $\Delta TR = (TR2 - TR1)$

TL2 : water temperature after heating in left beaker
 TL1 : water temperature before heating in left beaker
 TR2 : water temperature after heating in right beaker
 TR1 : water temperature before heating in right beaker

Measuring condition;

As the microwave output is affected by several conditions, the measurement should be made carefully with following attentions.

1. Initial temperature of salt water should be 10 ± 1 °C. Well and quickly stir the water and the temperature measurement should be done immediately after heating.
2. The graduation of thermometer should be scaled by 0.1 °C at minimum and an accurate mercury thermometer is recommended.
3. Water container should be one (1) litre beaker made of Pyrex glass and its diameter approximately 12 cm.

TEST PROCEDURES (CONT'D)

PROCEDURE LETTER

COMPONENT TEST

4. Room temperature should be around 20 °C.
5. Power supply voltage should be specification voltage.

B

POWER TRANSFORMER TEST

DISCHARGE THE HIGH VOLTAGE CAPACITOR BEFORE TOUCHING ANY OVEN COMPONENTS OR WIRING.

Disconnect the primary input terminals and secondary output terminals and measure the resistance of the transformer with an ohmmeter. Check for continuity of the coils with an ohmmeter. On the R x 1 scale, the resistance of the primary coil should be approx. 1.5 ohm and the resistance of the high voltage coil should be approximately 80 ohms; the resistance of the filament coil should be less than 1 ohm.

(HIGH VOLTAGES ARE PRESENT TO HIGH VOLTAGE TERMINAL, SO DO NOT ATTEMPT TO MEASURE THE FILAMENT AND HIGH VOLTAGE.)

C

HIGH VOLTAGE RECTIFIER ASSEMBLY TEST

DISCHARGE THE HIGH VOLTAGE CAPACITOR BEFORE TOUCHING ANY OVEN COMPONENTS OR WIRING.

HIGH VOLTAGE RECTIFIER TEST

Isolate the high voltage rectifier assembly from the circuit. Using the highest ohm scale of the meter, read the resistance across the high voltage rectifier terminals and observe, reverse the leads to the high voltage rectifier terminals and observe meter reading. If a short is indicated in both directions, or if an infinite resistance is read in both directions, the high voltage rectifier is probably defective and should be replaced with rectifier.

RECTIFIER TEST

Isolate the high voltage rectifier assembly from the circuit. Using the highest ohm scale of the meter, read the resistance across the rectifier terminals, reverse the leads to the rectifier terminals and observe meter reading. If an infinite resistance is read in both directions, the rectifier is good.

If a short is indicated in either direction, the rectifier is probably defective and should be replaced with the high voltage rectifier. When the rectifier is defective, check whether magnetron, high voltage rectifier, high voltage wire, power transformer filament leads are shorted.

D

HIGH VOLTAGE CAPACITOR TEST

DISCHARGE THE HIGH VOLTAGE CAPACITOR BEFORE TOUCHING ANY OVEN COMPONENTS OR WIRING.

If the capacitor is open, no high voltage will be available to the magnetron. Disconnect input leads and check for short or open, between the terminals using an ohmmeter. Checking with a high ohm scale, if the high voltage capacitor is normal, the meter will indicate continuity for a short time and should indicate approximately 10M Ω once the capacitor is charged. If the above is not the case, check the capacitor with an ohmmeter to see if it is shorted between the terminals. If it is shorted, replace the capacitor.

E

SWITCH TEST

(RD82603U)

Isolate the switch and check the contacts by using an ohmmeter using the following table. If improper operation is indicated, make the necessary switch adjustment or replacement.

Table: Switch Connection

Connection Operation	Common Terminal-Normally Open Terminal (COM) (NO)	Common Terminal-Normally Close Terminal (COM) (NC)
Plunger released	Open circuit	Close circuit
Plunger pushed	Closed circuit	Open circuit

TEST PROCEDURES (CONT'D)

PROCEDURE
LETTER

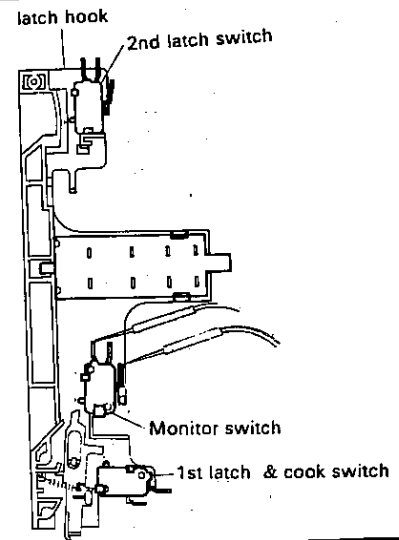
COMPONENT TEST

F

MONITOR SWITCH TEST

Disconnect the oven from the power supply. Disconnect the wire lead from NC terminal of the monitor switch. Before performing this test, make sure the 1st latch & cook switch is operating properly referring to "Switch Test Procedure".

Connect one ohmmeter lead to NC terminal of monitor switch, and the other lead to COM terminal of monitor switch, as shown figure. When the door is opened, the meter should indicate a close circuit. When the plunger of monitor switch is pushed by a screw-driver through the latch hook hole on the front plate of the oven cavity with the door opened, the meter should indicate an open circuit. In case improper operation is indicated, replace the defective monitor switch. After testing the monitor switch, re-connect the wire lead to NC terminal of the monitor switch.



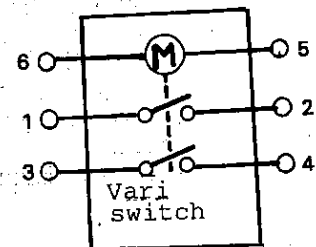
G

TIMER (WITH VARI-SWITCH) TEST**TIMER CONTACTS TEST**

Disconnect the wire leads from the timer.

With the timer advanced, a check of contacts with an ohmmeter should indicate (1) and (2) contacts are closed. With the timer set at "●", an ohmmeter should indicate they are opened. With 220 volts A.C. applied to the timer-motor coil (5) and (6), check for continuity between the vari-switch contacts (8) and (9). When the microwave cooking control set at "HIGH" position, the meter should indicate a closed circuit. If set at any other position refer to the following chart.

VARI-MODE	ON TIME	OFF TIME
FULL POWER (approx. 100% power)	30 sec.	0 sec.
ROAST (approx. 70% power)	24 sec.	6 sec.
SIMMER (approx. 50% power)	18 sec.	12 sec.
DEFROST (approx. 30% power)	12 sec.	18 sec.
WARM (approx. 10% power)	6 sec.	24 sec.



ON: Meter indicates closed. OFF: Meter indicates open.

If improper operation is indicated, replace the timer. If proper operation is indicated, check for loose or broken wire connections. After testing the timer, reconnect the wire leads to the timer with referring to the "Pictorial Diagram".

TIMER MOTOR TEST

With the oven operating, check with a voltmeter at the timer motor lead (connected across the timer coil 5 and 6). If voltage is present, but the timer motor does not turn, replace the timer. If no power, check for loose or broken wiring.

TEST PROCEDURES (CONT'D)

PROCEDURE
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COMPONENT TEST

H

THERMAL CUT-OUT TEST

1. Disconnect the wire leads from the thermal cut-out, and remove the thermal cut-out.
2. Connect the ohmmeter leads to the thermal cut-out.
3. Check the indication of the ohmmeter according to the above table.
4. If improper operation is indicated, replaced the thermal cut- out and check the points of the table at the same time.

After testing the thermal cut-out, re-install the thermal cut-out in place and re-connect wire leads to the thermal cut-out correctly referring to "Pictorial Diagram".

Table: Thermal cut-out test

Parts Name	Temperature of "ON" condition (closed circuit). (°C)	Temperature of "OFF" condition (open circuit). (°C)	Indication of ohmmeter (When room temperature is approx. 20 °C.)	Check points (When the thermal cut-out is defective, or when it operates.
Heater thermal cut-out.	From 105 °C down.	From 125 °C up.	Closed circuit.	Fan blade, fan duct, fan motor, air intake duct, ventilation opening partition plate, exhaust duct.
Cooling thermal cut-out.	From 100 °C up.	From 80 °C down.	Open circuit.	
Magnetron thermal cut-out.	From -20 °C down.	From 115 °C up.	Closed circuit.	

I

GRILL HEATING ELEMENT TEST

- Make sure the heating element is fully cooled and test as follows;
- a. Remove the grill heater unit with referring to "GRILL HEATING ELEMENT REMOVAL" and measure the resistance with an ohmmeter. On the R x 1 scale, the resistance between the heating element terminals should be about 36ohms.
 - b. Remove the grill heater unit with referring to "GRILL HEATING ELEMENT REMOVAL" and measure the insulation resistance with 500V - 100M Ω insulation resistance meter. The insulation resistance between heating element terminal and cavity should be more than 10M Ω .

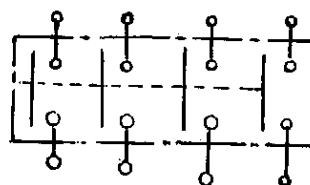
J

HEATER SWITCH TEST

- Isolate the heater switch referring to "Heater switch removal".
- Connect the ohmmeter leads between the heater switch terminals (1) and (5), (2) and (6), (3) and (7), (4) and (8).
- And check the each operation according to above table.
- If improper operation is indicated, replace the heater switch.
- After testing the heater switch, re-install it in place and re-connect wire leads to it referring to "Pictorial Diagram".

Table: Heater switch operation

Connexion	Terminal (1) - Another terminal (5) Terminal (2) - Another terminal (6) Terminal (3) - Another terminal (7) Terminal (4) - Another terminal (8)
Operation	
Plunger released	Open circuit
Plunger pushed	Closed circuit



Heater switch

TEST PROCEDURES (CONT'D)

PROCEDURE
LETTER

COMPONENT TEST

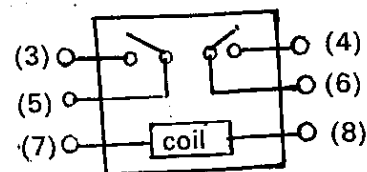
K

HEATER RELAY TEST

Disconnect the wire leads from heater relay terminals (3), (4), (5), (6), (7) and (8).

CONTACTS:

With 220 volts A.C. applied to the heater relay coil (7) and (8), a check of contacts with an ohmmeter should indicate (3) and (5) contacts are closed and should indicate (4) and (6) contacts are closed. Without 220 volts A.C. applied to the heater relay coil (7) and (8), an ohmmeter should indicate those contacts are opened. If improper operation is indicated, replace the heater relay. If proper operation is indicated, check for loose or broken wire connections.

COIL:

A continuity check of the heater relay coil should indicate approximately 18.8 k Ω . If the meter does not indicate above ohms, replace the heater relay.

After testing the relay, re-connect the wire leads to it correctly referring to "Pictorial Diagram".

L

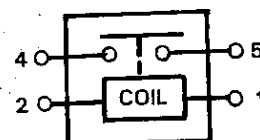
SURGE RELAY TEST

Disconnect the wire leads from surge relay terminals (1), (2), (4) and (5).

CONTACTS:

With 220 volts A.C. applied to the surge relay coil (1) and (2), a check of contact with an ohmmeter should indicate (4) and (5) contacts are closed.

Without 220 volts A.C. applied to the surge relay coil (1) and (2), an ohmmeter should indicate those contacts are opened. If improper operation is indicated, replace the surge relay. If proper operation is indicated, check for loose or broken wire connections.

COIL:

A continuity check of the surge relay coil should indicate approximately 15 k Ω . If the meter does not indicate above ohms, replace the surge relay.

After testing the relay, re-connect the wire leads to it correctly referring to "Pictorial Diagram".

TEST PROCEDURES (CONT'D)

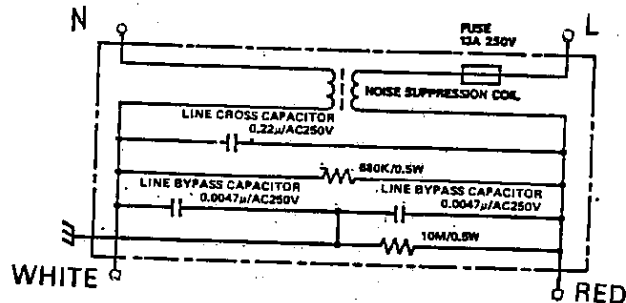
PROCEDURE LETTER

COMPONENT TEST

M

NOISE FILTER TEST

Disconnect the oven from the power supply. Remove the noise filter unit referring to "Noise Filter Unit Removal". Connect ohmmeter leads to connector N and L on the noise filter unit, connector N and white terminal, or connector L and red terminal. And then measure the each resistance.



MEASURING POINTS	INDICATION OF OHMMETER
Between connector N and L	Approximately 680K Ω
Between connector N and terminal WHITE	Short
Between connector L and terminal RED	Short

If the ohmmeter does not indicate above resistance, replace the noise filter unit. In case the ohmmeter indicates open circuit, check the fuse 13 A 250V. If the fuse 13A 250V blows, replace it. After testing the noise filter unit, re-install the noise filter unit in place and reconnect the wire leads to it correctly referring to "Pictorial Diagram".

N

FUSE F6.3A

(RD82Z02U)

If the fuse in the monitor switch circuit is blown when the door is opened, check the 1st latch & cook switch and monitor switch according to "Test Procedure" for those switches, before replacing the blown fuse.

If the fuse is blown by improper switch operation, replace the defective switch and fuse at the same time.

Replace just the fuse if the switches operate normally.

CAUTION; REPLACEMENT FUSE MUST BE THE LISTED FUSE IN PARTS LIST.

O

MONITOR RESISTOR TEST AND SURGE RESISTOR TEST

1. Disconnect the wire leads from the resistor.
2. Connect the ohmmeter leads to the resistor.
3. Check the resistance of the resistor.
4. The ohmmeter should indicate the resistance of the above table.
5. If the ohmmeter indicates improper resistance, replace the resistor.

If the resistor is burned out or the resistor indicates infinite resistance, check the parts of the above table.

After testing the resistor, re-connect the wire leads to the resistor correctly referring to "Pictorial Diagram".

Table: Resistance of monitor resistor and surge resistor

Resistor	Resistance	Check points (If the resistor is defective.)
Monitor resistor	Approx. 3.6 Ω	Fuse F6.3A Wire harness
Surge resistor	Approx. 10 Ω	Surge relay contacts Wire harness

COMPONENT REPLACEMENT AND ADJUSTMENT PROCEDURE

WARNING: To avoid possible exposure to microwave energy;

- A. Before operating the oven
 1. Make sure that unlatching the door slowly is accompanied by a click indicating actuation of the monitor switch and 2nd latch switch.
 2. Check visually the door seal for arcing and damage.
- B. Do not operate the oven before any of the following conditions are repaired;
 1. Door does not close firmly against the front of appliance.
 2. There is a broken door hinge or support.
 3. The door is bent or warped.

4. There is any defective parts in the interlock, oven door or microwave generating and transmission assembly.
5. There is any other visible damage to the oven.
- C. Do not operate the oven
 1. Without the RF gasket.
 2. If the door is not closed.

CAUTION: DISCONNECT OVEN FROM POWER SUPPLY BEFORE REMOVING OUTER CASE. DISCHARGE HIGH VOLTAGE CAPACITOR BEFORE TOUCHING ANY OVEN COMPONENTS OR WIRING.

OUTER CASE REMOVAL

To remove the outer case, proceed as follows:

1. Disconnect oven from power supply.
2. Remove screws from the rear and along the side edge of the case.
3. Slide the entire case about 3cm to free it from retaining clips on the cavity face plate.

4. Lift the entire case from the the unit.
- CAUTION: DISCHARGE THE HIGH VOLTAGE CAPACITOR BEFORE TOUCHING ANY OVEN COMPONENTS OR WIRING**

HIGH VOLTAGE CAPACITOR AND HIGH VOLTAGE RECTIFIER ASSEMBLY REMOVAL

1. Disconnect the oven from power supply and remove the outer case cabinet.
2. Discharge the high voltage capacitor.
3. Referring to from the item 3 through the item 5 of "NOISE FILTER UNIT REMOVAL", pull the noise unit angle out of the oven.
4. Remove the single (1) screw holding the capacitor holder to the rear cabinet.
5. Release the single (1) tab of the capacitor holder from the rear cabinet.
6. Remove the single (1) screw holding the earth side terminal of the high voltage rectifier assembly.

7. Remove the capacitor holder from the high voltage capacitor.
8. Remove the high voltage rectifier assembly. Now, the high voltage rectifier assembly is free.
9. Remove the wire leads from the high voltage capacitor. Now, the high voltage capacitor is free.

CAUTION: WHEN REPLACING THE HIGH VOLTAGE RECTIFIER ASSEMBLY, THE EARTH SIDE TERMINAL MUST BE SECURED FIRMLY WITH A EARTHING SCREW.

POWER TRANSFORMER REMOVAL

1. Disconnect the oven from power supply and remove the outer case cabinet.
2. Discharge the high voltage capacitor.
3. Remove the single (1) screw holding the noise unit angle, and release the single (1) tab of the noise unit angle from the rear cabinet.
4. Remove the single (1) screw holding the high voltage capacitor holder to the rear cabinet, and release the single (1) tab of the high voltage capacitor holder from the rear cabinet.
5. Remove the two (2) purse locks joining the high voltage wire leads together. (Refer figure C-1. the position of the purse locks.)
6. Reconnect the wire lead of the power transformer from the high voltage capacitor with the high voltage wire (B).
7. Reconnect the wire lead of the power transformer from the "J" type tab terminal of the high voltage wire (B).

8. Disconnect the high voltage wire (A) from the power transformer.
9. Disconnect the magnetron heater lead of the power transformer from the magnetron.
10. Remove the two (2) screws and the single (1) washer holding the power transformer to the base plate.
11. Now, the power transformer is free.

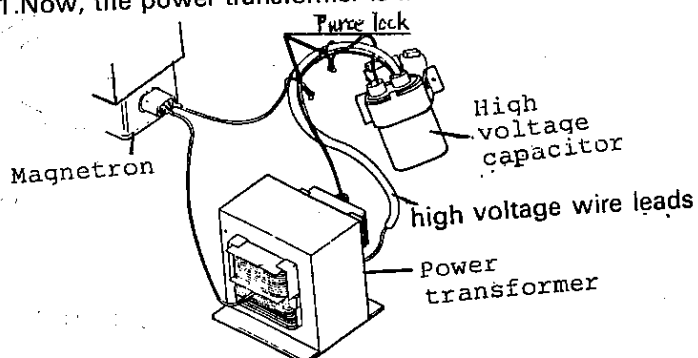


Figure C-1. The position of the purse locks

MAGNETRON REMOVAL

1. Disconnect the oven from power supply and remove the outer case cabinet.
 2. Discharge the high voltage capacitor.
 3. Disconnect the magnetron heater lead of power transformer and high voltage wire (B) from the magnetron.
 4. Remove the single (1) screw holding the air intake duct to the magnetron.
 5. Referring to from item 3 through item 7 of "FAN MOTOR REMOVAL", remove the fan duct.
 6. Remove the four (4) screws holding the magnetron to the oven (waveguide flange).
 7. Remove the magnetron from the oven with care so the magnetron antenna should not hit by any metal object.
 8. Now, the magnetron is free.
- CAUTION:** WHEN REPLACING THE MAGNETRON, BE SURE THE R.F GASKET IS IN PLASE AND THE MAGNETRON MOVNTING SCREWS TIGHTENED SECURELY.

NOISE FILTER UNIT REMOVAL

1. Disconnect the oven from power supply and remove the outer case cabinet.
2. Discharge the high voltage capacitor.
3. Disconnect the wire harness (for cord connector) from the cord connector and from the noise filter unit.
4. Remove the single (1) screw holding the noise unit angle to the rear cabinet.
5. Pull the noise unit angle out of the oven.
6. Disconnect the wire harness (main) from the noise filter unit.
7. Remove the single (1) screw holding the noise filter unit to the noise unit angle.
8. Release the two (2) tabs of the noise filter unit from the noise unit angle. Now, the noise unit filter is now free.

FAN MOTOR REMOVAL

1. Disconnect the oven from power supply and remove the outer case cabinet.
2. Discharge the high voltage capacitor.
3. Disconnect the wire harness (main) from the fan motor.
4. Release the wire harness (main) from the wire holder and from the hole on the fan duct.
5. Remove the single(1) screw holding the fan duct to the magnetron.
6. Release the single (1) tab of fan duct from the hole on the thermal protection cover (Right). (Refer 1 of Figure C-2.)
7. Release the three (3) tabs of fan duct from the three (3) holes on the rear cabinet, and remove the fan duct from the oven. (Refer 2 and 3 of Figure C-2.)
8. Remove the two (2) screws and two (2) nuts holding the fan motor to the fan duct.
9. Now, the fan motor is free.

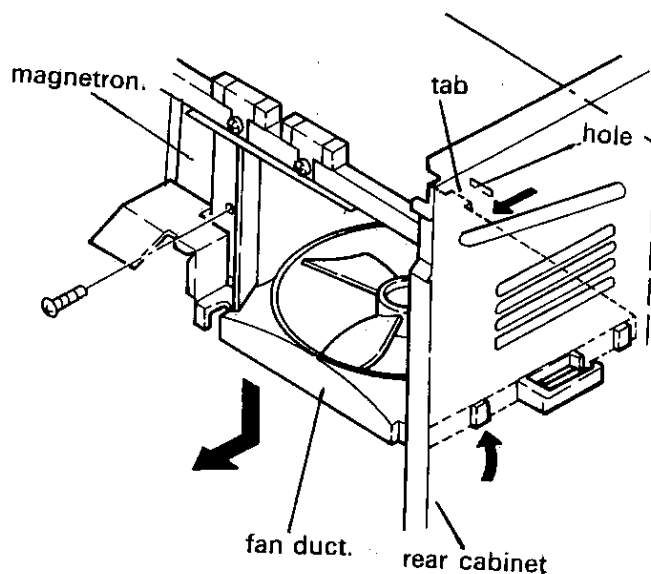


Figure C-2. Fan Duct Removal

GRILL HEATING ELEMENT REMOVAL

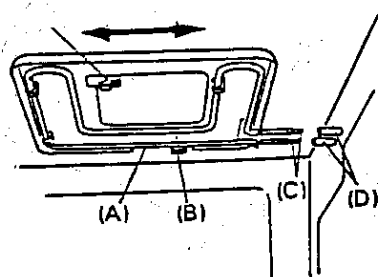
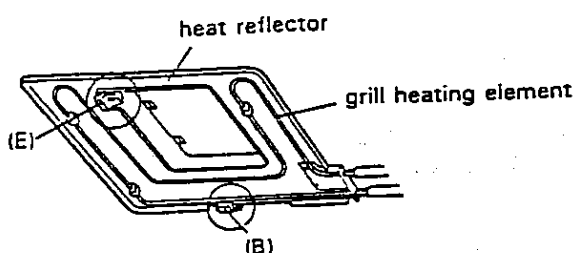
1. After removing the grill heater unit from the oven, referring to "GRILL HEATER UNIT", remove the two (2) screws holding the grill heating element to the reflector.
2. Release the grill heating element for the three (3) heater insulators.
3. Now, the grill heating element is free.

HEATER SOCKET REMOVAL

1. Disconnect the oven from power supply and remove the outer case cabinet.
2. Discharge the high voltage capacitor.
3. Remove the heater unit from the oven, referring to "GRILL HEATER UNIT".
4. Disconnect the wire leads from the heater socket.
5. Remove the two (2) screws holding the heater socket to the oven.

GRILL HEATER UNIT

The grill heater unit can be removed to clean the heat reflector and the ceiling of oven cavity.



Correctly connected position of the heater unit. (Note the circled portions.)

6. Now, the heater socket is free.

NOTE: At installation of the heater socket, install the heater socket so that the two (2) terminals of the heater socket become lower position.

TO REMOVE THE GRILL HEATER UNIT Be sure the grill heater unit and the oven are not hot. Lift up the left side of the grill heater unit slightly so that the heat reflector disengages the insulators (B) and (E) and then pull out carefully to the left.

TO INSTALL THE GRILL HEATER UNIT

- a. To install the grill heater unit, hook the part (A) of the heat reflector onto the insulator (B) located at the back of oven ceiling.
- b. Hold the grill heater unit horizontally and fit the two terminals (C) into the heater socket (D).
- c. Push the grill heater unit to the right, all way into the heater socket (D), until stopped by the insulator (E).

WARNING

BE SURE THE GRILL HEATER UNIT AND THE OVEN WALL HAVE ALREADY COOLED DOWN BEFORE TOUCHING. THE GRILL HEATING ELEMENT MAY BE HOT EVEN IF IT IS DARK IN COLOUR.

1. DO NOT SOAK HEATER TERMINALS IN WATER WHILE YOU WASH THE GRILL HEATER UNIT.
2. THE GRILL HEATER UNIT MUST BE INSTALLED PROPERLY FOR EACH COOKING MODE EVEN IF IT IS NOT USED FOR GRILLING.

TIMER REMOVAL

1. Disconnect the oven from power supply and remove the outer case cabinet.
2. Discharge the high voltage capacitor.
3. Disconnect the wire harness (for control panel) from the wire harness(main).
4. Open the door.
5. Remove the three (3) screws holding the control panel to the oven.
6. Lift up the control panel and remove it from the oven.
7. Disconnect the wire harness (for control panel) from the timer.
8. Remove the four (4) screws holding the timer to the control panel.
9. Remove the timer knob assembly and the variable cooking control knob from the timer.
10. Now the timer is free.

TURNTABLE MOTOR AND COUPLING REMOVAL

1. Disconnect the oven from power supply.
2. Remove the single (1) screw holding the turntable motor cover to the base plate, and remove the turntable motor cover.
3. Disconnect the wire leads from the turntable motor.
4. Remove the two (2) screws holding turntable motor to the oven.
5. Now, the turntable motor is free.
6. Remove the coupling from the oven. Now, the coupling is free.

CAUTION:

The two (2) screws holding the turntable motor to the oven must be used the specified screws (XFPJD40P08000) as listed on Parts List.



OVEN LAMP REMOVAL

1. Disconnect the oven from the power supply.
2. Remove the single (1) screw holding the oven lamp access cover to the outer case cabinet.
3. Open the oven lamp access cover.
4. Remove the oven lamp with turning it.
5. Now, the oven lamp is free.

OVEN LAMP SOCKET REMOVAL

1. Disconnect the oven from the power supply.
2. Remove the outer case cabinet.
3. Discharge the high voltage capacitor.
4. Pull the two (2) wire leads from the oven lamp socket by pushing the terminal hole of the oven lamp socket with the flat type small screw driver.
5. Tear the oven lamp cushion from the oven lamp mounting plate.
6. Lift up the oven lamp socket.
7. Now, the oven lamp socket is free.

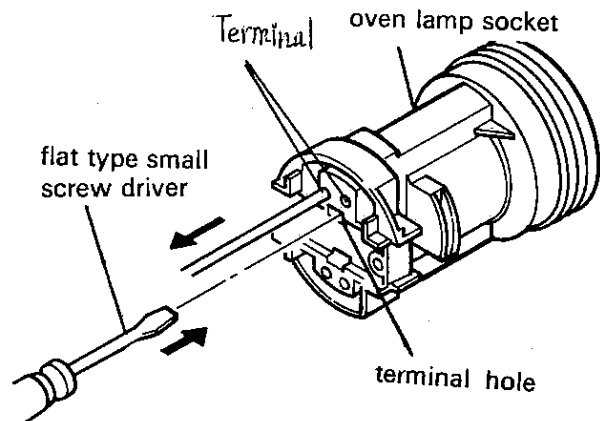


Figure C-3. Oven lamp socket

1ST LATCH SWITCH & COOK SWITCH, 2ND LATCH SWITCH, MONITOR SWITCH AND HEATER SWITCH REMOVAL

1. Remove the control panel, referring to from item 1 through item 6 of "TIMER REMOVAL".
2. Remove the single (1) screw holding the relay mounting plate to the base plate.
3. Remove the two (2) screws holding the latch hook to the oven.
4. Pull the latch hook out of the oven flange.
- 5-1. 1st latch & cook switch removal
 - 1) Disconnect the wire leads from the 1st latch & cook switch.
 - 2) Push the 1st latch & cook switch under with pushing the right side tab to the right side, and remove the switch from the latch switch.
- 5-2. 2nd latch switch removal
 - 1) Disconnect the wire leads from the 2nd latch switch.
 - 2) Push the 2nd latch switch to the right side with pushing the right side tab to the back side, and remove the switch from the latch hook.
- 5-3. Monitor switch removal
 - 1) Disconnect the wire leads from the monitor switch.
 - 2) Push the monitor switch to the right side with pushing the right side tab to the back side, and remove the switch from the latch hook.
- 5-4. Heater switch removal
 - 1) Disconnect the wire leads from the heater switch.
 - 2) Pull the heater switch to this side with pushing the upper side tab to upper side and pushing the lower side tab to lower side, and remove the switch from latch hook.

CAUTION: WHEN REMOVING THE SWITCHES, DON'T BREAK THE TABS OF THE LATCH HOOK.

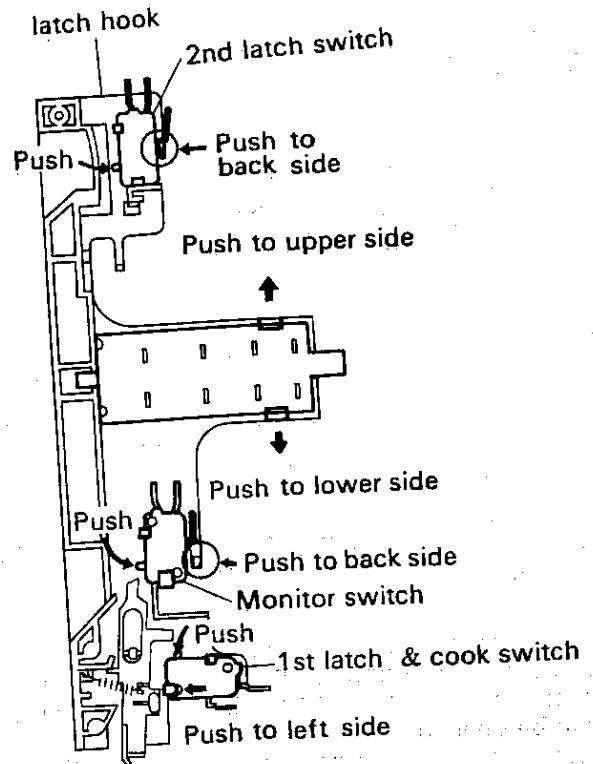


Figure C-4. How to remove the switch

1ST LATCH & COOK SWITCH, 2ND LATCH, HEATER SWITCH AND MONITOR SWITCH ADJUSTMENT

In case 1st latch & cook switch, 2nd latch, heater switch and monitor switch do not operate properly due to a mis-adjustment, the following adjustment should be made.

1. Loosen the two (2) screws holding the latch hook.
2. With the door closed and the cook button pushed, adjust the latch hook by moving it back and forward, or up and down. In and out play of the door allowed by the latch hook should be less than 0.5 mm.
The vertical position of the latch hook should be placed where the 1st latch & cook switch has activated with the door closed and the cook button pushed. The horizontal position of the latch hook should be placed where the 2nd latch switch and monitor switch have activated with the door closed.
3. Secure the screws with washers firmly.
4. Make sure of the 1st latch & cook switch, 2nd latch switch, heater switch and monitor switch operation. If those switches have activated with the door closed and the cook button pushed, loose two (2) screws holding latch hook and adjust the latch hook position.

After adjustment, make sure of the following:

1. The 1st latch & cook switch, 2nd latch switch and heater switch interrupt the circuit before the door can be opened.
2. The monitor switch contacts close when the door is opened.
3. Re-install outer case and check for microwave leakage around the door with an approved microwave survey meter. (Refer to Microwave Measurement Procedure.)

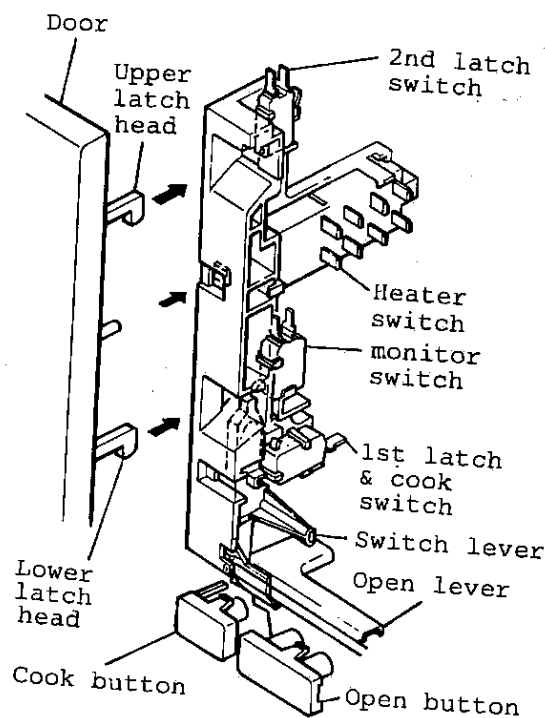


Figure C-5. Latch Switch Adjustments

LATCH HEAD AND DOOR PIN REMOVAL

Remove the door assembly, referring to from item 1 through item 5 of "DOOR REPLACEMENT".

1. Place the door assembly on a soft cloth with facing up.
2. Remove the choke cover, referring to "CHOKE COVER REMOVAL".
3. Remove the three (3) screws holding the door sash to the door panel assembly.

(DOOR SASH REMOVAL)

4. Pull the middle part of the door sash and release the lower tab of the door sash from the door frame.
5. Release the upper tab of the door sash from the door sash. Now, the door sash is free.

(DOOR GLASS REMOVAL)

6. Slide the door glass to the right side until stopped by door frame.
7. Slide the door glass up until stopped by the door frame.
8. Release the lower part of the door glass from the door frame at first, and then release the upper part of the door glass from the door frame. Now, the door glass is free.

(DOOR FRAME REMOVAL)

9. Remove the nine (9) screws holding the door frame to the door panel assembly.
10. Release the door frame from the door assembly, now the door frame is free.

(UPPER AND LOWER LATCH HEADS REMOVAL)

11. Release the latch spring from the tab of the door panel assembly.
12. Remove the two (2) screws and nuts holding the upper and lower latch heads to the door panel assembly.
13. Release the latch heads with latch shaft and latch spring from the door panel assembly.
14. Release the upper and lower latch heads from the latch shaft. Now, the latch heads are free.
15. Release the latch spring from the latch shaft. Now, the latch spring is free.
16. Remove the single (1) nut and two (2) washers holding the door pin to the door panel assembly. Now, the door pin is free.

DOOR REPLACEMENT AND ADJUSTMENT

DOOR REPLACEMENT

1. Disconnect oven from power supply and remove the outer case.
2. Discharge high voltage capacitor.
3. Remove five (5) screws holding the upper and lower oven hinge to the oven cavity. The lower oven hinge is now free.
4. Remove door assembly with upper oven hinge by pulling it forward.
5. Separate the door assembly and upper oven hinge. Door assembly is now free.
6. Re-installing upper oven hinge to the new door assembly.
7. On re-installing new door assembly, secure the door assembly with the five (5) mounting screws to the oven cavity. Make sure the door is parallel with bottom line of the oven face plate and the latch head pass through the latch holes correctly.

Note: After any service to the door, and approved microwave survey meter should be used to assure in compliance with proper microwave radiation standards. (Refer to Microwave Measurement Procedure.)

DOOR ADJUSTMENT

When removing and/or loosening hinges such as in door replacement, the following adjustment criteria are taken. Door is adjusted to meet the following three conditions by keeping screws of hinge loose.

1. Adjust door latch heads and door pin at a position where they smoothly catch the latch hook through the latch holes. Refer to switches adjustments.
2. Deviation of the door alignment from horizontal line of cavity face plate is to be less than 1.0mm.
3. The door is positioned with its face depressed toward the cavity face plate.
4. Reinstall outer case and check for microwave leakage around the door with an approved microwave survey meter. (Refer to Microwave Measurement Procedure.)

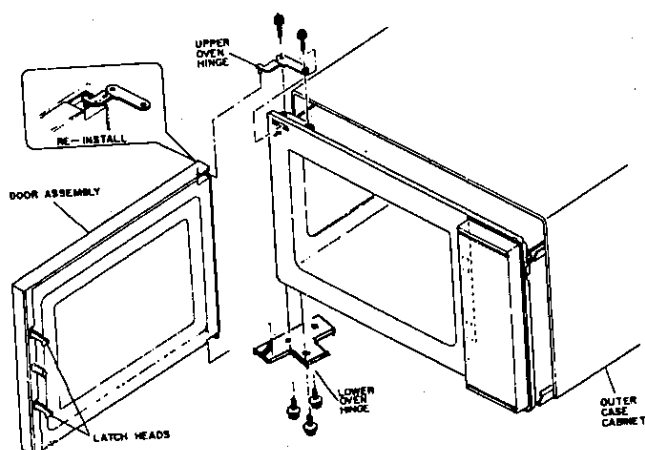


Figure C-6. Door Assembly Replacement and Adjustment

CHOKE COVER REMOVAL

1. Place the door assembly on a soft cloth with latches facing up.
2. Insert an iron plate (thickness of about 0.5mm) to the gap between the choke cover and door panel as shown figure to free the engaging part.
3. Lift up the choke cover, now cover is free.

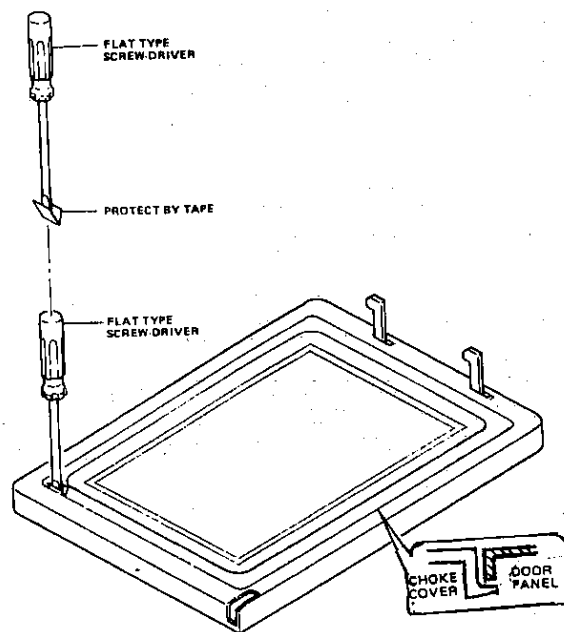


Figure C-7. Choke Cover Removal

MICROWAVE MEASUREMENT

After adjustment of door latch switches, monitor switch and door are completed individually or collectively, the following leakage test must be performed with a survey instrument and it must be confirmed that the result meets the requirements of the performance standard for microwave oven.

REQUIREMENT

The safety switch must prevent microwave radiation emission in excess of 5mW/cm² at any point 5cm or more from external surface of the oven.

PREPARATION FOR TESTING:

Before beginning the actual test for leakage, proceed as follows;

1. Make sure that the test instrument is operating normally as specified in its instruction booklet.
Important:
Survey instruments that comply with the requirement for instrumentations as prescribed by the performance standard for microwave ovens must be used for testing.

Recommended instruments are:

NARDA 8100

NARDA 8200

HOLADAY HI 1500

SIMPSON 380M

2. Place the oven tray into the oven cavity.
3. Place the load of 275 \pm 15ml of water initially at 20 \pm 5 °C in the center of the oven tray. The water container should be a low form of 600 ml beaker with inside diameter of approx. 8.5cm and made of an electrically non-conductive material such as glass or plastic.
The placing of this standard load in the oven is important not only to protect the oven, but also to insure that any leakage is measured accurately.
4. Close the door and turn the oven ON with the timer set for several minutes. If the water begins to boil before the survey is completed, replace it with 275ml of the cool water.
5. Move the probe slowly (not faster than 2.5cm/sec.) along the gap.
6. The microwave radiation emission should be measured at any point of 5cm or more from the external surface of the oven.

(RDB1103U)

POSITION OF THE WIRE TIES

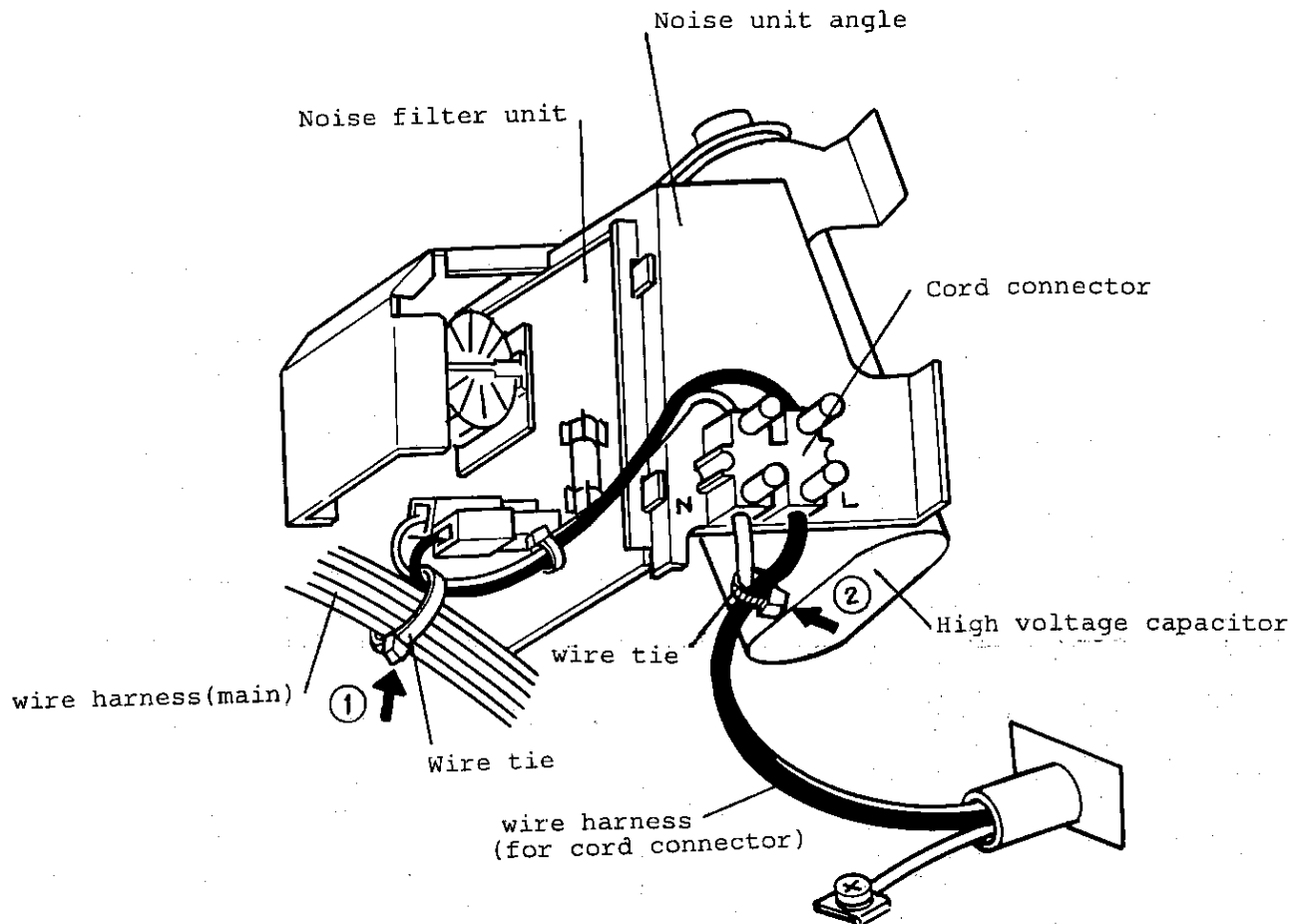


Figure R-1. The position of the wire ties

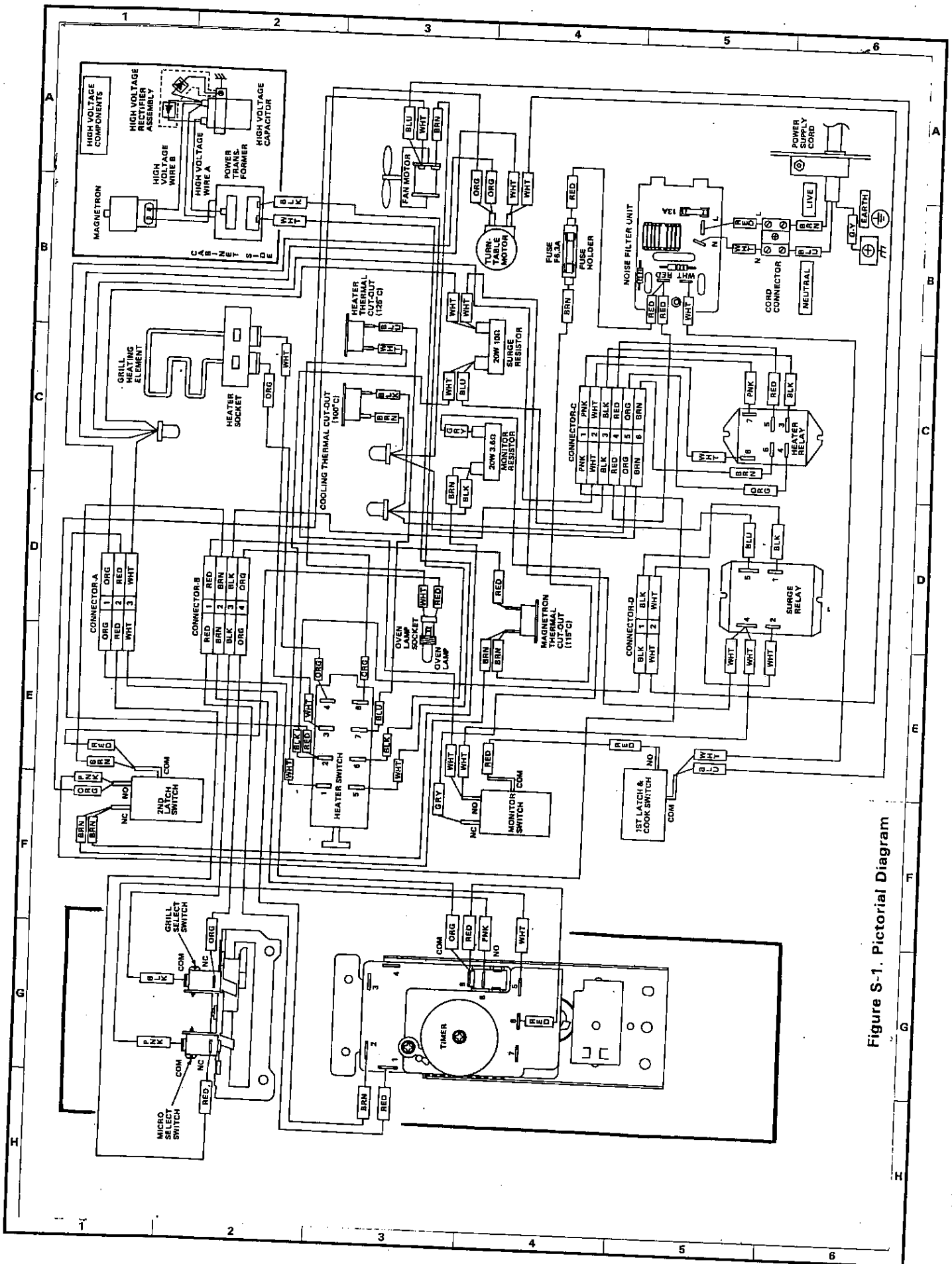


Figure S-1. Pictorial Diagram

PARTS LIST

Note: The parts marked "*" are used in voltage more than 250V.
 "S" MARK: SPARE PARTS-DELIVERY SECTION

REF. NO.	PART NO.	Q'TY	CODE
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ELECTRIC PARTS

1- 1	QSWTEA050WREO	U	Timer(with vari-switch)	1	BC
1- 2	FPWBFA152WREO	J	Noise filter unit	1	AT
1- 3	QTANNA001WREO	J	Cord connector	1	AF
1- 4	FH-DZA005WREO	J	High voltage rectifier assembly	1	AQ
1- 5	RC-QZA045WREO	J	High voltage capacitor	1	AX
1- 6	FRLY-A001WRKO	J	Heater relay	1	
1- 7	FRLY-A002WRKO	J	Surge relay	1	AE
1- 8	QFSDA002WREO	J	Fuse holder	1	AW
1- 9	RHET-A040WREO	U	Grill heating element	1	AG
1-10	QSW-MAC40WREO	J	1st latch & cook switch(V-16G-3C5)	1	
1-11	QSW-MA042WREO	J	2nd latch switch(V-16G-1C5) and monitor switch	2	AG
1-12	QSW-MA041WREO	J	Micro select switch and grill select switch(V-16G-2C5)	2	
1-13	QSW-PA001WREO	J	Heater switch	1	AW
1-14	RMOTEA105WREO	U	Fan motor	1	AP
1-15	FSOCHA003WREO	U	Heater socket	1	AQ
1-16	QACCVA010WREO	U	Power supply cord Note; When the power supply cord is replaced, the brown and blue wire leads of the power supply cord should be tied with the wire tie 6-15 (LBNDKA004WREO) at the ame time.	1	
1-17	QFS-CA009WREO	U	Fuse 13A	1	AC
1-18	QFS-CA011WREO	U	Fuse F6.3A	1	AB
1-19	QSOCLA011WREO	U	Oven lamp socket	1	AE
1-20	RLMPTA028WREO	J	Oven lamp	1	AM
1-21	RMOTDA065WREO	U	Turntable motor	1	AS
1-22	RR-WZ0026WREO	J	Surge resistor 20W 10 Ω	1	AH
1-23	RR-WZ0027WREO	J	Monitor resistor 20W 3.6 Ω	1	AH
1-24	RTHM-A022WREO	U	Cooling thermal cut-out(100 °C)	1	AH
1-25	RTHM-A017WREO	J	Magnetron thermal cut-out(115 °C)	1	AG
1-26	RTHM-A023WREO	J	Heater thermal cut-out(125 °C)	1	AG
1-27	RTRN-A177WREO	U	Power transformer	1	BP
1-28	RV-MZA064WREO	U	Magnetron	1	BH

CABINET PARTS

2- 1	FFTASAO19WRKO	U	Oven lamp access cover : R-6G10(B)	1	AM
	FFTASAO20WRKO	U	Oven lamp access cover : R-6G10(W)	1	AM
2- 1A	PCUSGA165WRPO	U	Cushion	1	AB
2- 1B	PSLDPA004WRPO	U	Reflection tape	1	AB
2- 2	GCABUA183WRPO	U	Outer case cabinet : R-6G10(B)	1	AY
	GCABUA187WRPO	U	Outer case cabinet : R-6G10(W)	1	AY
2- 3	TMAPCA356WRRO	U	Schematic diagram	1	AB
2- 4	LANGQA119WRPO	U	Relay mounting plate	1	AE
2- 5	GDAI-A101WRPO	U	Base plate	1	AU
2- 6	GLEGPA013WREO	J	Foot	6	AB
2- 7	GCOVHA143WRPO	U	Turntable motor cover	1	AF
2- 8	LANGQA011WRMO	U	Earth angle	1	AA
2- 9	PCAPHA004WREO	J	Cabinet cap : R-6G10(B)	2	AA
	PCAPHA005WREO	J	Cabinet cap : R-6G10(W)	2	AA
2-10	PSPAGA001WREO	U	Vaibration cushion	1	AA

CONTROL PANEL PARTS

3- 1	FKNBKA154WRKO	U	Timer knob assembly : R-6G10(B)	1	AE
	FKNBKA159WRKO	U	Timer knob assembly : R-6G10(W)	1	AE
3- 2	FKNBKA155WRKO	U	Variable cooking control knob : R-6G10(B)	1	AE
	FKNBKA160WRKO	U	Variable cooking control knob : R-6G10(W)	1	AE
3- 3	FLEVPA005WRKO	U	Mode select lever	1	AE

Note : The parts marked "*" are used in voltage more than 250V.
"S" MARK: SPARE PARTS-DELIVERY SECTION

REF. NO.	PART NO.	S	DESCRIPTION	Q'TY	CODE
3- 4	FPNLCA453WRKO	U	Control panel frame : R-6G10(B)	1	AU
3- 5	FPNLCA469WRKO	U	Control panel frame : R-6G10(W)	1	AU
3- 6	FANGQA050WREO	U	Mode select assembly	1	AP
	JBTN-A430WRFO	U	Open button : R-6G10(B)	1	AC
	JBTN-A438WRFO	U	Open button : R-6G10(W)	1	AC
3- 7	JBTN-A431WRFO	U	Cook button : R-6G10(B)	1	AC
	JBTN-A439WRFO	U	Cook button : R-6G10(W)	1	AC
3- 8	JKNBKA248WRFO	U	Mode select knob : R-6G10(B)	1	AD
	JKNBKA258WRFO	U	Mode select knob : R-6G10(W)	1	AD
3- 9	MSPRCA045WREO	U	Open button and cook button spring	3	AA

DOOR PARTS

4	CDORFA284WRKO	U	Door assembly, complete : R-6G10(B)	1	BQ
4- 1	CDORFA296WRKO	U	Door assembly, complete : R-6G10(W)	1	BQ
4- 2	DDORFA226WRKO	U	Door panel assembly	1	BQ
4- 3	GCOVHA145WRFO	U	Choke cover	1	BG
	GWAKPA073WRFO	U	Door frame : R-6G10(B)	1	AL
	GWAKPA076WRFO	U	Door frame : R-6G10(W)	1	AR
4- 4	HDECQA081WRFO	U	Door sash : R-6G10(B)	1	AR
	HDECQA084WRFO	U	Door sash : R-6G10(W)	1	AE
4- 5	LSTPPA053WRFO	U	Lower latch head	1	AE
4- 6	LSTPPA056WRFO	U	Upper latch head	1	AC
4- 7	MSPRTA075WREO	U	Latch spring	1	AC
4- 8	NSFTTA039WREO	U	Latch shaft	1	AC
4- 9	PGLSPA148WREO	U	Door glass : R-6G10(B)	1	AC
	PGLSPA152WREO	U	Door glass : R-6G10(W)	1	AZ

OVEN PARTS

5- 1	FROLPA030WRKO	U	Roller stay assembly	1	AU
5- 2	NTNT-A018WRHO	U	Turntable	1	AT
5- 3	DOVN-A161WRKO	U	Oven cavity	1	BP
5- 4	GCABDA031WRPO	U	Rear cabinet	1	AW
5- 5	LANGFA080WRPO	U	Chassis support	1	AH
5- 6	GCOVHA157WRPO	U	Noise unit cover	1	AD
5- 7	LANGQA120WRPO	U	Noise unit angle	1	AE
5- 8	PZETEA020WRPO	U	Noise insulation sheet	1	AC
5- 9	LBNDKA017WRPO	U	High voltage capacitor holder	1	AC
5-10	PCOVPA119WREO	U	High voltage capacitor cover	1	AD
5-11	PCUSGA176WREO	U	Air intake cushion L	1	AE
5-12	PCUSGA178WRPO	U	Air intake cushion B	1	AC
5-13	PCUSGA179WRPO	U	Air intake cushion C	1	AC
5-14	PDUC-A245WRPO	U	Air intake duct	1	AE
5-15	PGISHA030WREO	U	Insulator	3	AF
5-16	PREFHA024WREO	U	Heat reflector	1	AT
5-17	MLEVPA107WRFO	U	Switch lever	1	AE
5-18	MSPRCA048WREO	U	Switch lever spring	1	AA
5-19	PHOK-A036WRFO	U	Latch hook	1	AN
5-20	FFANJA013WRKO	J	Fan blade	1	AE
5-20A	LSTY-0030WREO	J	Fan retainer	1	AA
5-21	PDUC-A246WRKO	U	Fan duct	1	AL
5-22	LANGHA007WRPO	U	Partition plate	1	AF
5-23	LANGQA116WRPO	U	Oven lamp mounting plate	1	AF
5-24	LANGTA203WRPO	U	Cavity bracket	1	AE
5-25	LSTPPA054WRFO	U	Cord anchorage(upper)	1	AC
5-26	LSTPPA055WRFO	U	Cord anchorage(lower)	1	AC
5-27	MHNG-A139WRPO	U	Lower oven hinge	1	AF
5-28	MHNG-A140WRPO	U	Upper oven hinge	1	AE
5-29	MLEVFA049WRPO	U	Open lever	1	AE
5-30	NCPL-A023WRFO	U	Coupling	1	AH
5-31	NSFTTA038WREO	U	Open shaft	1	AB
5-32	PCOVPA147WREO	U	Waveguide cover	1	AE
5-33	PCOVPA158WREO	U	Thermal protection cover (small)	1	AD
5-34	PCUSGA175WRPO	U	Partition cushion	1	AD
5-35	PCUSUA009WRPO	U	Cushion	2	AA
5-36	PSLDMA088WRPO	U	Aluminum tape	4	AK
5-37	PDUC-A244WRPO	U	Exhaust duct	1	AE
5-38	PDUC-A248WRPO	U	Air duct	1	AE

Note : The parts marked "*" are used in voltage more than 250V.
 "S" MARK: SPARE PARTS-DELIVERY SECTION

REF. NO.	PART NO.	S	DESCRIPTION	Q'TY	CODE
5-39	PFPF-A045WREO	U	Thermal protection sheet(Right)	1	AK
5-40	PFPF-A046WREO	U	Thermal protection sheet(Left)	1	AK
5-41	PFPF-A051WREO	U	Thermal protection sheet(Small)	1	AK
5-42	PGISHA031WREO	U	Reflector insulation	2	AF
5-43	PGLSPA147WREO	U	Oven lamp screen glass	1	AH
5-44	PSLDHA042WRPO	U	Thermal protection cover(Left)	1	AH
5-45	PSLDHA043WRPO	U	Thermal protection cover(Right)	1	AK
5-46	PCUSUA127WRPO	U	Air duct cushion	1	AB
5-47	PCUSUA128WRPO	U	Cavity cushion	1	AC
5-48	PCUSGA193WRPO	U	Thermo cushion	1	AD
5-49	PCUSGA165WRPO	U	Cushion	1	AB

MISCELLANEOUS

6- 1	FAMI-A022WRKO	U	High rack assembly(135mm)	1	AU
6- 2	FAMI-A023WRKO	U	Low rack assembly(50mm)	1	AT
6- 3	TAPLKA032WRRO	U	FTZ card	1	AB
6- 4	TCADCA148WRRO	U	Cook book(for grill cooking)	1	AN
6- 5	TCADCA189WRRO	U	Cook book(for microwave cooking)	1	AU
6- 6	TINS-A065WRRO	U	Operation manual	1	AH
6- 7	FW-VZA517WREO	U	Wire harness(for control panel)	1	AQ
6- 8	TSPCQA034WRRO	U	Model name label : R-6G10(B)	1	AB
6- 9	TSPCQA036WRRO	U	Model name label : R-6G10(W)	1	AB
6- 9	FW-VZA519WREO	U	Wire harness(for cord connector)	1	AE
			Note; When the wire harness(for cord connector) is replaced, it is should be tied by the wire tie 6-15 (LBNDKA004WREO) together with the wire harness(main) at the same time.		
6-10	QW-QZA073WREO	U	High voltage wire A	1	AD
6-11	QW-QZA074WREO	U	High voltage wire B	1	AE
6-12	TLABSA017WRRO	U	Fuse label	1	AB
6-13	FW-VZA516WREO	U	Wire harness(main)	1	BA
			Note; When the wire harness(main) is replaced, it should be tied by the wire tie 6-15 (LBNDKA004WREO) together with the wire harness(for cord connector) at the same time.		
6-14	FW-VZA554WREO	U	Wire harness(for heater socket)	1	AL
6-15	LBNDKA004WREO	U	Wire tie	2	AB
6-16	LBNDKA005WREO	U	Wire holder	2	AB
6-17	LHLDWQ004YBEO	J	Purse lock "L"	2	AA
6-18	TCAUHA021WRRO	U	Caution label	1	AC
6-19	TCAUHA040WREO	U	High temperature caution	1	AC
6-20	TSPCNA831WRRO	U	Rating label	1	AC

SCREWS, NUTS, WASHERS AND RING

7- 1	LX-BZA066WREO	U	Door pin screw	1	AB
7- 2	LX-BZ0202WREO	U	Screw; upper and lower latch head mtg.	2	AB
7- 3	LX-WZA014WREO	U	Washer; door pin screw mtg.	1	AA
7- 4	XCPSPD30P08X00	U	Screw; door frame, heater relay mtg.	7	AA
7- 5	XCPSPD30P08000	U	Screw; door frame mtg.	3	AA
7- 6	XCPSPD40P08000	U	Screw; door sash mtg.	3	AA
7- 7	XNESD30-24000	U	Nut; door pin screw mtg.	1	AA
7- 8	XNESD40-32000	U	Nut; upper and lower latch mtg.	2	AA
7- 9	XWSSD30-08000	U	Washer; door pin screw mtg.	1	AA
7-10	LX-CZA035WREO	U	Screw; rear cabinet mtg.	4	AA
7-11	XHTSD40P08RV0	U	Screw; chassis support relay unit, air intake duct, surge resistor, monitor resistor, noise unit, high voltage capacitor holder mtg.	8	AA
7-12	XTTSD40P10000	U	Screw; timer, mode select assembly and fan duct mtg.	7	AA
7-13	XCTSD40P06000	U	Screw; noise unit cover, wire holder mtg.	3	AA
7-14	XFPSD30P14000	U	Screw; cord connector mtg.	1	AA
7-15	XFPSD40P08K00	U	Screw; noise unit, high voltage rectifier assembly mtg.	3	AA

Note : The parts marked "*" are used in voltage more than 250V.
"S" MARK: SPARE PARTS-DELIVERY SECTION

REF. NO.	PART NO.	S	DESCRIPTION	Q'TY	CODE
7-16	XHSSB40P08000	U	Screw; Oven lamp access cover mtg. : R-6G10(B)	1	AA
7-17	XHSSC40P08000	U	Screw; Oven lamp access cover mtg. : R-6G10(W)	1	AA
7-18	XFPSP30P10000	U	Screw; surge relay mtg.	1	AA
7-19	XBTUW40P06000	U	Screw; fuse holder mtg.	1	AA
			Screw; grill heating element,	4	AA
7-20	XBPSD30P14KS0	U	waveguide cover, cavity bracket mtg.		
7-21	XBPSD40P25000	U	Screw; micro select switch, grill	2	AA
7-22	XNESD40-32000	U	select switch mtg.		
			Screw; fan motor mtg.	2	AA
7-23	LX-BZA037WRE0	U	Nut; fan motor, cord anchorages mtg.	3	AA
	LX-BZA036WRE0	U	Screw; outer case cabinet mtg. : R-6G10(B)	5	AA
7-24	LX-BZA054WRE0	U	Screw; outer case cabinet mtg. : R-6G10(W)	5	AA
7-25	LX-BZA056WRE0	U	Screw; reflector insulator mtg.	2	AB
	LX-BZA057WRE0	U	Screw; outer case cabinet mtg. : R-6G10(B)	4	AA
			Screw; outer case cabinet mtg. : R-6G10(W)	4	AA
7-26	LX-BZA061WRE0	U	Screw; heater socket, oven lamp		
7-27	LX-CZA020WRE0	U	mounting plate mtg.	4	AA
7-28	LX-CZA030WRE0	U	Screw; upper and lower oven hinge mtg.		
7-29	LX-EZA004WRE0	U	Screw; exhaust duct, partition plate mtg.	5	AA
			Screw; latch hook mtg.	2	AA
7-30	XBPSD40P30000	U	Screw; cord anchorages mtg.	2	AA
7-31	XBPSD50P10KS0	U	Screw; power transformer mtg.	1	AA
7-32	XBPUW30P08000	U	Screw; cavity bracket mtg.	2	AA
7-33	XFPSP30P08000	U	Screw; cooling thermal cut-out(100 °C),	1	AA
			magnetron thermal cut-out(115 °C),		
7-34	XFPSP40P08000	U	heater thermal cut-out(125 °C) mtg.		
7-35	XFPSP40P10000	U	Screw; turntable motor mtg.	2	AA
			Screw; magnetron, turntable motor	5	AA
7-36	XFTSD40P08K00	U	cover mtg.		
			Screw; earth angle mtg.	1	AA
7-37	XNEUW40-32000	U	Nut; reflector insulation mtg.		
7-38	XOTSD40P12RV0	U	Screw; base plate mtg.	1	AB
7-39	XTTSD40P12000	U	Screw; control panel mtg.	8	AA
7-40	XWHSD40-08000	U	Washer; cord anchorages mtg.	3	AA
7-41	XWWSD50-06000	U	Washer; power transformer mtg.	1	AA
				1	AA

HOW TO ORDER REPLACEMENT PARTS

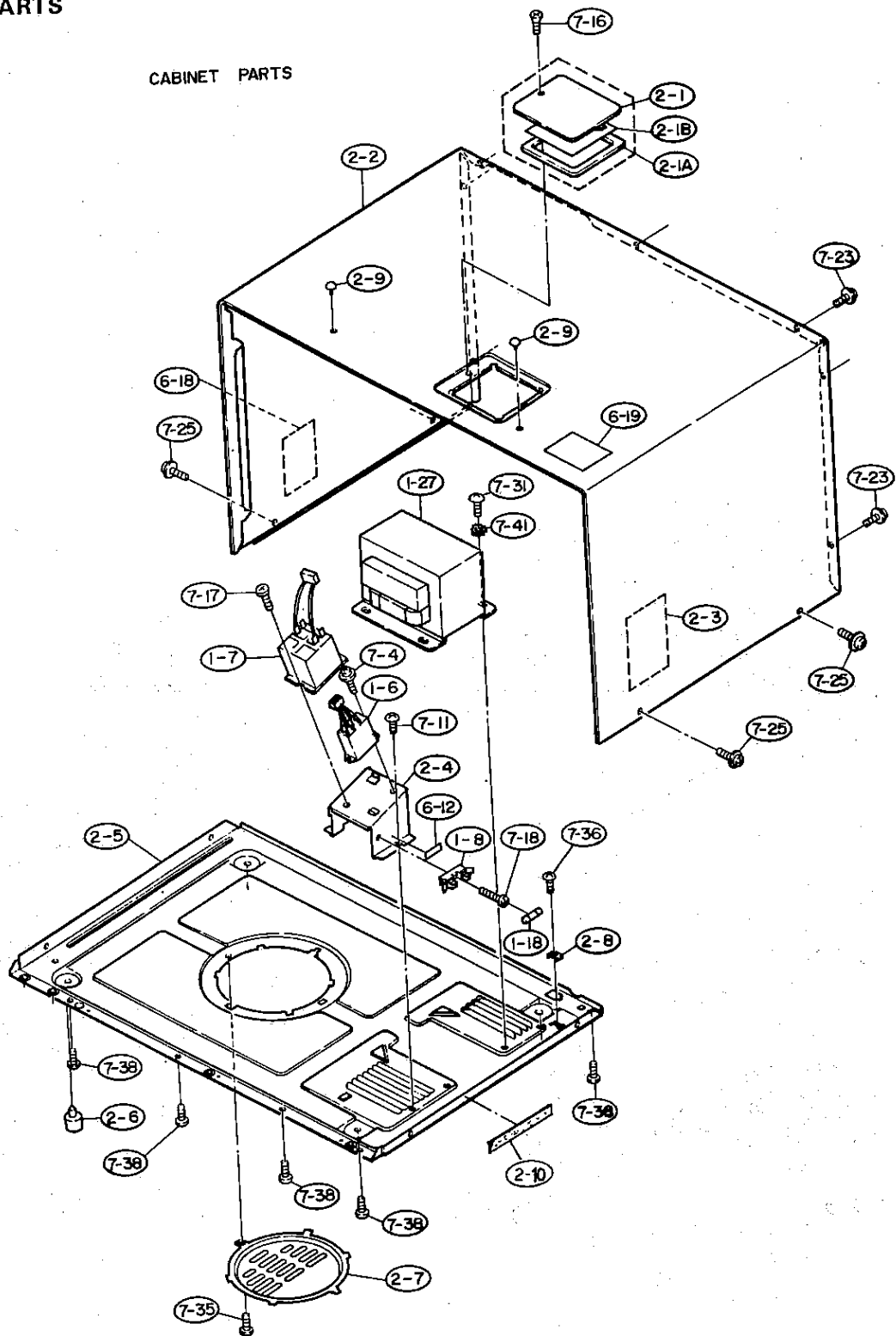
To have your order filled promptly and correctly, please furnish the following information.

1. MODEL NUMBER
2. REF. NO.
3. PART NO.
4. DESCRIPTION

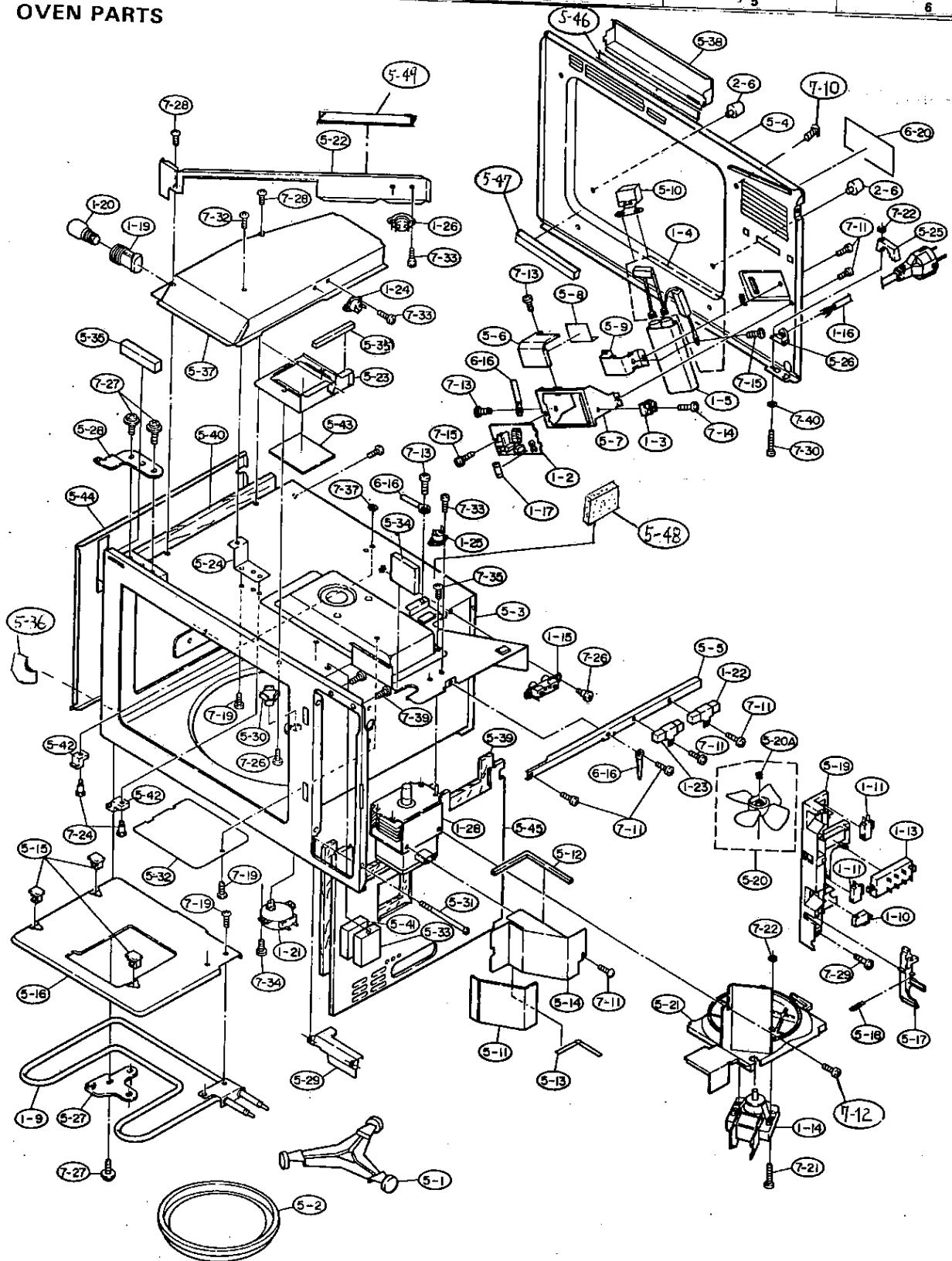
(RDP1303U)

A CABINET PARTS

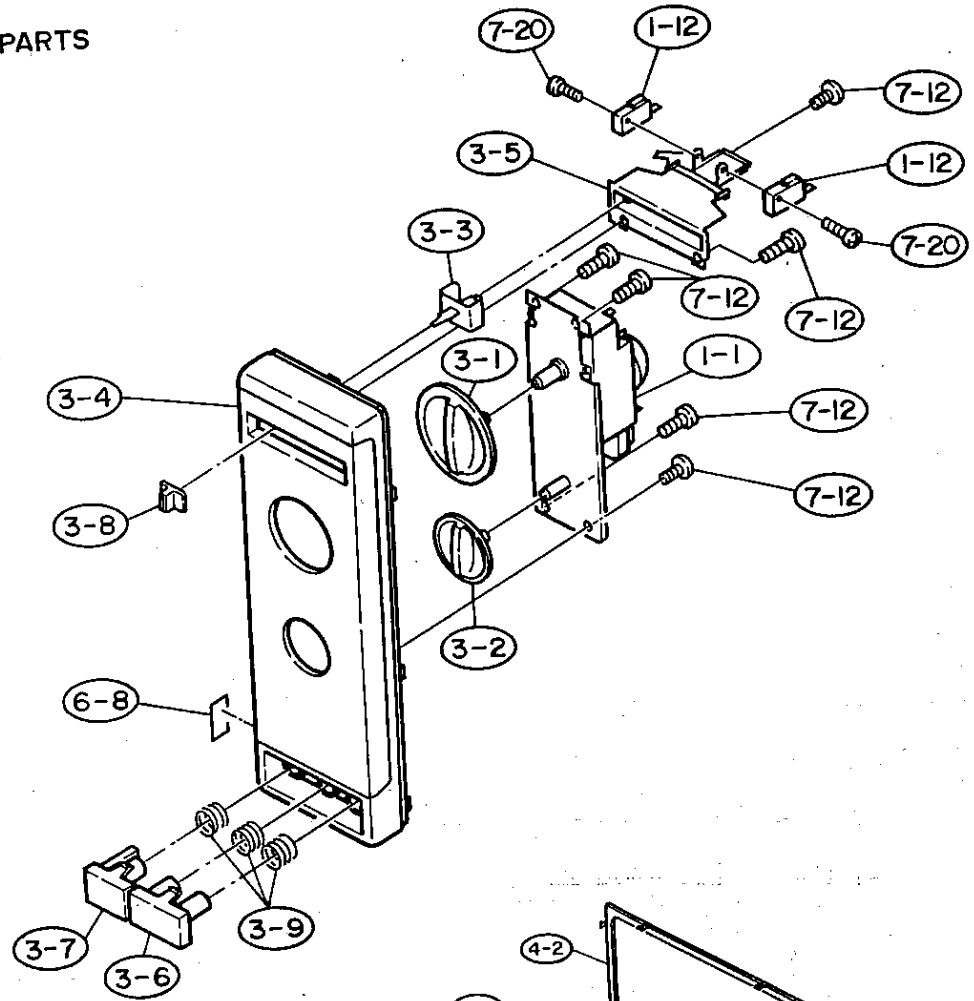
CABINET PARTS



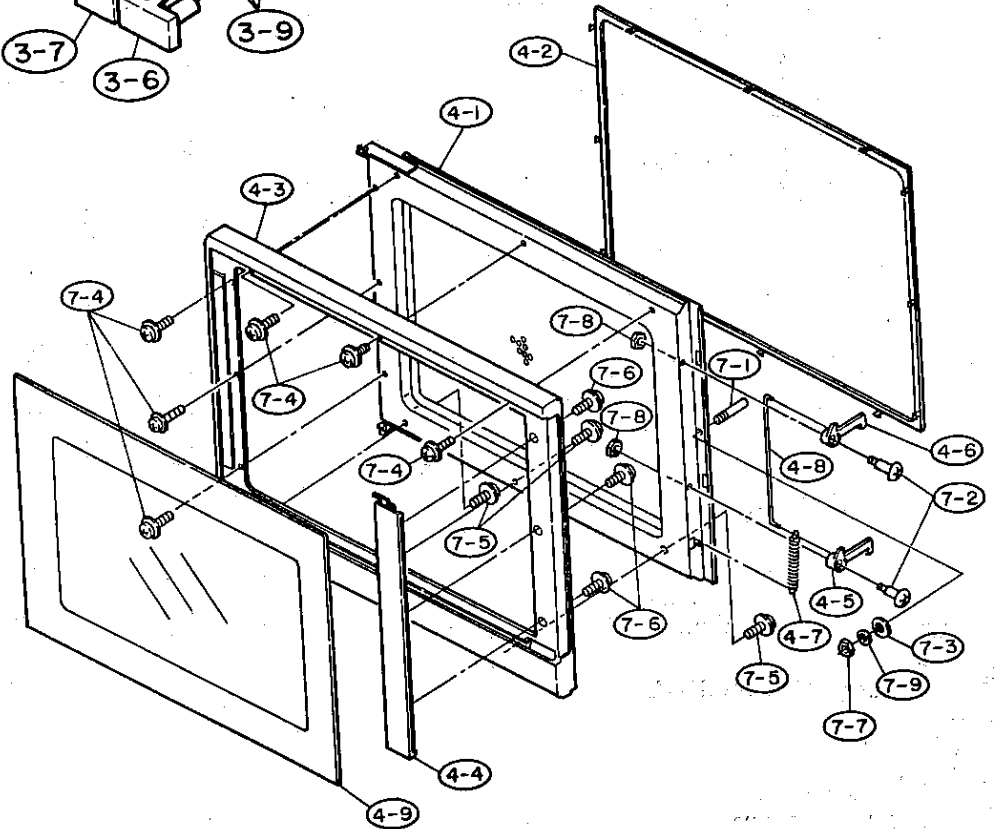
OVEN PARTS



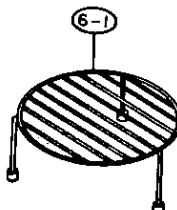
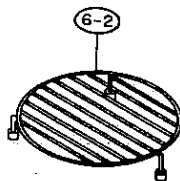
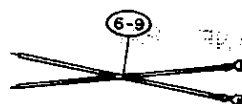
CONTROL PANEL PARTS



DOOR PARTS



MISCELLANEOUS.



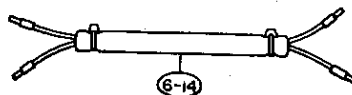
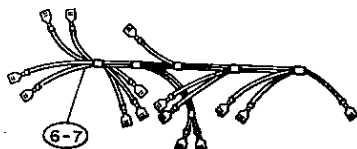
(HVC) (HVT)

6-11

6-10

(MG) (HVC)

6-13



PACKING AND ACCESSORIES

HEAT HOLDER * (SPADFA087WREO)

* TRAY HOLDER (SPADFA085WREO)

TURN TABLE

H/TRIVET ASSY

L/TRIVET ASSY

PRINT ASSY

ROL STY ASSY

DOOR PROTECT * (SPADPA020WREO)

TOP PAD L

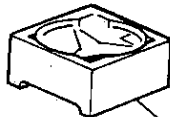
TOP PAD R

WRAP COVER * (SSAKH004WREO)

DOOR PAD * (SPADBA069WREO)

BTM PAD L

BTM-PAD R



TRAY PAD * (SPADPA170WREO)

HEAT HOLDER

HEATER UNIT

TRAY HOLDER TRAY PAD

PACKING ADD KIT * (CPADBA063WREO)

PACK CASE

* (R-6G10(B): SPAKCA889WREO)
* (R-6G10(W): SPAKCA910WREO)

*: Not Replaceable Items.